

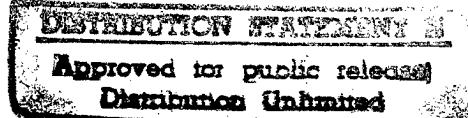
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17 January 1984

# East Europe Report

## ECONOMIC AND INDUSTRIAL AFFAIRS



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17 January 1984

EAST EUROPE REPORT  
ECONOMIC AND INDUSTRIAL AFFAIRS

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BULGARIA

ROLE, GOALS OF 1984 ECONOMIC PLAN TRACED

Sofia POLITICHESKA PROSVETA in Bulgarian No 11, 1983 pp 3-12

[Unattributed article: "For New Successes in the 1984 Jubilee Year"]

[Text] At the end of September, the Tenth Session of the National Assembly adopted the laws governing the 1984 unified plan of socioeconomic development and the state budget. They are of key importance in carrying out the Eighth Five-Year Plan and the decisions of the 12th Party Congress. The achieving of the planned economic growth rates will be a new, important step along the path of building a mature socialist society.

The fulfillment of the plan will occur under the imprint of two major political events: the National Party Conference and the 40th anniversary of the socialist revolution. These will provide new political assessments of the nation's socioeconomic development. The party's political, ideological and organizational work to properly celebrate these must become a source of new powerful incentives for unleashing the initiative and creativity of the workers and for accelerated and stable development during the 1984 jubilee year.

I

Of fundamental significance for drawing up the state plan were the theoretical and methodological concepts of Comrade Todor Zhivkov on state planning and counterplanning as worked out and established in his lectures to the faculty and students of the Academy for Social Sciences and Social Administration [AONSU]. The state plan has as its basic content the concretizing of the state's functions as the owner of the means of production. It [the plan] "...encompasses the entire production process and the cultural and social advance of the nation. It guarantees the proportional development of society, the balancing of the economy, the basic social measures, the fulfillment of our obligations in the international division of labor and our responsibilities to the fraternal socialist countries."<sup>1</sup>

The crucial role of 1984 in carrying out the Eighth Five-Year Plan is the crucial initial concern in compiling the state plan for the following year. The rates and proportions of economic development in 1984 have been determined in accord with the Law Governing the Unified Socioeconomic Development Plan for the People's Republic of Bulgaria in the Eighth Five-Year Plan and the theses of the 12th Party Congress.

The fulfillment of the program for raising the standard of living is the starting point of the state plan. As was pointed out by Comrade Todor Zhivkov, "...both production and foreign trade activities must not be viewed as an end in themselves but rather develop in such a manner as to provide new opportunities for raising the standard of living. This is the main thing, this is the decisive thing."<sup>2</sup> The 1984 State Plan provides the necessary resources for carrying out party policy aimed at steadily raising the prosperity of the people. In working out the plan, particular attention was given to the problems, tasks and ideas raised in the speeches of Comrade Todor Zhivkov at the December Plenum of the Party Central Committee (1982) and at the National Conference in Varna in May of this year.

The established economic growth rates are based on a more efficient use of raw products, materials and energy. Due to a number of circumstances, the importing of an additional amount of raw material and energy resources is not envisaged. Only the production of our own raw materials and energy will increase. The limited resources which the nation possesses demands that the basic portion of these go into the development of structure-forming sectors and production, for solving the basic problems related to the introduction of the top achievements of scientific and technical progress and for increasing the standard of living. Of exceptional importance for ensuring the plan with sufficient resources was the achieving of the envisaged savings under the program for the efficient use of raw products, materials and energy.

The 1984 State Plan realizes the idea of Comrade Todor Zhivkov that "...scientific and technical progress must not be a section but rather the basis of the state plan, its essence and must be present everywhere. By the plan there must be a constant renovation of both the production methods and the products."<sup>3</sup>

An essential aspect in the preparation of the plan was the broad involvement of the ministries, okrug people's councils, the economic organizations and trade unions in working out and approving the state plan quotas. The concluding stage in its preparation was the plenum of the party Central Committee and the Tenth Session of the National Assembly.

The improved approach and the active involvement of the party, state, economic and social organizations have contributed substantially to the drawing up of a realistic and balanced state plan and state budget. This ensures the further all-round intensification of the economy, the accelerated introduction of modern scientific and technical achievements, the improving of the sectorial and intrasectorial production structure, the effective involvement of the nation in the socialist division of labor and the fuller and more comprehensive satisfying of the people's growing material and spiritual needs.

The starting point for the 1984 plan was the achieved economic and social development during the first 3 years of the five-year plan. Their balance shows that our economy developed at an ascending and stable rate. A general expression of economic prosperity is the increase in national income. In 1983, national income is expected to increase by 5.5 percent over 1982 and over the 3 years (1981-1983) an average annual growth of 4.6 percent is expected with a planned rate of 3.5 percent according to the Law Governing the Eighth Five-Year Plan. This stable economic growth was achieved with the significant losses

suffered from the bad climatic conditions for agriculture this year and with worsening foreign economic and international market conditions.

National income has been growing with increasing effectiveness of social production. Social labor productivity over the 3 years of the five-year plan has increased by 12 percent. Over the same period, a decline of 2.82 leva of material expenditures per 100 leva of product was achieved and a relative savings was realized of 1,587,000,000 leva in material and energy resources. The greatest savings of material resources was at the economic organizations of machine building and electronics, the chemical industry, light industry and the Sofia People's Council.

Production profitability has been growing at a more rapid rate than planned (measured by aggregate profit minus the turnover tax per 100 leva of productive capital). With an average annual rate of 8.5 percent planned by the Theses of the 12th Party Congress, over the 3 years close to 10 percent was achieved.

A new decisive step was taken in improving the sectorial and intrasectorial structure of the national economy. During the 3 years the volume of industrial product increased by an annual average of 5.1 percent, as was envisaged in the Law Governing the Eighth Five-Year Plan. A higher growth rate, in comparison with the one set in the five-year plan, was achieved in machine building and electronics (annual average rate of 9 percent with a planned 8.5 percent) and the chemical and rubber industries (9.1 percent in comparison with 7.7 percent). During the first 3 years of the five-year plan, the prosperity of the people grew at a faster than planned rate. In 1983, real income is expected to increase by 2.8 percent and over the 3 years as an annual average by 4 percent with 2.8 percent planned in the five-year plan. Average monthly wages have also risen at a more rapid rate than the planned. Over the 3 years these are expected to reach 11 percent instead of the planned 9 percent and this, expressed in absolute amounts, equals 202 leva. The public consumption funds over the 3 years should rise by 15.5 percent and this is significantly above the planned. Production of consumer goods should increase and this reflects favorably on the normal supply of the public with foodstuffs and non-food items. Domestic services for the population have increased. In spite of this, a fundamental change in domestic services has not been achieved while the volume and quality of these services lag behind the increased demands of the public.

## II

The 1984 State Plan creates conditions for the further fulfillment of the decisions of the 12th Party Congress concerning the ubiquitous intensification of the national economy. An essential indicator for the deepening of intensive development is the planned lead in the growth of national income in comparison with the increase in aggregate social product. National income is expected to rise by 3.8 percent while social productivity will increase by 4 percent. This will lead to a relative savings of 204,000 persons. Higher labor productivity must not only compensate for the demand for additional manpower but also ensure an absolute reduction in the number of persons employed in material production by more than 11,000 persons.

The efficient use of labor resources is of strategic importance for national economic development. Virtually up to 1990, there will be no increase in the

working age population. The need for manpower will increase excessively for developing non-material production, for domestic services and trade. With the plan of 1984, the tendency will be overcome for an increase in the number of persons employed in material production, and conditions will be created for a portion of them to move into other sectors. The increase in labor productivity to the greatest degree will be determined by the introduction of the achievements from scientific and technical progress. In the plan a leading place has been given to new and advanced production methods, to new designs of machinery and equipment and to full mechanization and automation of production. The 1984 State Plan provides an additional (in comparison with what was established in the five-year plan) nearly 50 new targets with an annual economic effect of over 46 million leva.

The economic and efficient use of the raw material and energy resources is one of the cores of the plan and its fulfillment. The 1984 State Plan establishes a further decline in material expenditures per unit of product. A relative savings is to be achieved amounting to 210 million leva. The introduction of new production methods and material- and energy-efficient types of production will be of basic significance in this area.

Of crucial significance for deepening the intensive development of the national economy is the fullest and most effective use of the created large (for the scale of our nation) material and technical base. This problem is most immediately linked to the return on investment which directly influences the growth of national income. The trends in the return on investment to a large degree are linked to the development scale of the raw material and energy sectors and the other capital-intensive types of production. At the same time, these substantially are influenced by the degree of capacity utilization, by the unjustified increase in working capital and by the presence of above-norm inventories and unsold goods. The 1984 State Plan envisages the surmounting of the trend toward a decline in the return on investment measured by the national income per 100 leva of productive capital. The carrying out of this major national economic task requires that the economic organizations provide a full load on the production capacity, an accelerated turnover rate for the working capital and the eliminating of above-norm inventories and unsold goods.

A further improvement in the sectorial and intrasectorial economic structure is a major national economic factor in intensive development.

During the next year, our nation will take a new decisive step ahead in its industrial development. Industrial production will develop rapidly. Machine building, electronics, the chemical industry, power and metallurgy will grow most dynamically. Machine building products will increase by 10.2 percent and as a total for the 4 years they will increase by 42-43 percent with a 50 percent planned according to the Law Governing the Eighth Five-Year Plan. An essential feature in the development of machine building next year will be improved by developing predominantly complex and nonmetal-intensive products. Growing at a higher rate than the sector average will be electronics, robotics, computer and office equipment, instrument building and automation, communications equipment as well as heavy investment machine building. There is no other alternative if we wish to deepen intensive economic development and broaden our participation in the international division of labor.

The chemical industry will continue to develop at a rapid pace. Its product is to grow by around 9 percent and over the 4 years of the five-year plan will increase by nearly 42 percent with a planned increase of 45 percent as a total for the 5 years. The structural changes in the sector are aimed at developing chemical production which requires less energy and raw materials.

The production of ferrous metals will increase rapidly. The product of ferrous metallurgy is to increase by 10.8 percent. The reconstruction and modernization of existing metallurgical capacity and the building of new capacity will be continued and this will help improve the structure and raise metal quality.

In 1984 the production of electric power and thermal power should rise by 5.8 percent. The main factors in the development of power engineering are a full load at the nuclear power plant and expanded production of coal which should grow by 6.3 percent. According to the plan the national economy is supplied with the required energy resources.

In 1984, particular attention is to be paid to the development of the light and food industries. Important structural changes are planned in these sectors as well as improved quality of the product produced in them. The production of high-fashion and luxury goods will increase at a more rapid pace. An important area in the development of this sector is the fuller utilization of agricultural raw materials.

The plan creates the necessary prerequisites for a 3.1 percent increase in agricultural product. Stable grain production is envisaged. The task is to produce over 10 million tons of grain with an increased effectiveness of grain production. Some 2 million decares of corn are to be planted on irrigated land with an average yield of 1,000 kg per decare.

A vast construction program will be carried out next year with increasing efficiency in construction work. The total volume of capital investments will amount to 8.15 billion leva. A predominant portion of this is to go into the most imoprtant national economic projects for quickly completing production capacity and putting it into operation. This will make it possible to reduce the amount of incomplete construction by 8.3 points. The narrowing of the construction front requires great activity and strict observance of planning discipline, the efficient use of capital investments and the prompt completion of planned capacity. Progressive structural changes are envisaged in capital investments. The relative share of funds for automation in relation to the amount of funds for machinery and equipment in the chemical industry will increase by 4.3 points and in machine building and electronics by 5.6 points.

The transport system and communications will undergo further development. Income from transport operations will grow by 3.5 percent. The number of telephones will increase by about 10 percent and by over 13 percent especially for the public.

In 1984, foreign economic ties will develop rapidly. The growth rate of trade turnover should be more than 2-fold greater than the growth of national income. In the state plan the chief place has been given to production specialization and cooperation and to carrying out the tasks stemming from the Comprehensive

Program and the long-range specific collaboration programs with the socialist countries and primarily the Soviet Union. The plan guarantees the complete fulfillment of the obligations assumed by our nation in coordinating the plans, the concluded contracts and other agreements. The process of integration with the Soviet Union will be continued even more intensely on the basis of carrying out the measures in the General Scheme for Specialization and Cooperation in the Area of Material Production.

In carrying out economic relations with non-socialist countries, there is to be a further stabilizing of the positive balances of trade. In our relations with these countries the accent will be put on industrial cooperation, scientific, technical and trade collaboration, with the central place being given to machine building.

In 1984, an improvement in product quality will be an essential factor for intensive development of social production. The state plan envisages the creation of conditions for increasing the reliability, functionality and aesthetic qualities of the products by introducing new production methods and designs, by observing production and technical discipline and providing strict and effective control of all stages in the production process. Articles and groups of products have been determined for which a substantial improvement in quality is required. Among these are the battery operated and internal combustion engine plant trucks, robots, transmanipulators, electronic computers, storage units, rolled ferrous metals and a number of products from the light and food industries.

The state plan on a territorial breakdown is characterized by a further drawing together in the socioeconomic development of the territorial units. Special attention has been given to the accelerated development of the conurbation systems from the fourth and fifth functional types, for the border areas and the Strandzhan-Sakar Area.

The stable and dynamic development of the economy in 1984 creates new opportunities for increasing the prosperity of the people. Real per capita income should increase by 2.5 percent. As a total for the 4 years (1981-1984) this will rise by 15.8 percent with 15 percent planned by the Law Governing the Eighth Five-Year Plan. The Standard of Living Program, as was outlined at the December Plenum of the BCP Central Committee (1972) and concretized by the 12th Party Congress, is being successfully carried out in spite of the objective difficulties which have arisen in recent years.

The basic source for worker income will be, as hitherto, wages. These will grow by 2.5 percent and the average monthly amount will reach 207 leva. The planned increase in wages is in accord with the growth rate of labor productivity.

A further increase is anticipated in the income from the public consumption funds which will rise by 3.3 percent and reach 6,961,000,000 leva. As a per capita average the public consumption funds amount to 778 leva.

In 1984, we will continue to carry out the directive of the 12th Party Congress on a more rapid rise in commodity stocks in comparison with the increase in the

public's purchasing power. The plan establishes that the production of consumer goods will increase by 400 million leva over the amount planned for the following year by the five-year plan. Not only will more goods be available to the public, but there will also be a tangible improvement in their quality and their assortment will be diversified. Retail commodity turnover will increase by 4.2 percent. Per capita consumption of meat and meat products should rise to 71 kg in comparison with the expected consumption of 68.6 kg in 1983; for milk the figures are 219 liters in comparison with 210 liters, for eggs 230 units in comparison with 220, and for fruits 137 kg in comparison with 130 kg. Consumption of sugar and vegetable oils will be maintained on the 1983 level, however this is significantly above the scientifically based (rational) consumption standards. The consumption of consumer durables per 100 families will reach: 85 television sets, 79 washing machines, 86 refrigerators, 34 cars and 37.5 telephones.

Consumer services will take up an ever-larger share in the standard of living and these will grow by 6.2 percent. Developing at a rapid pace will be the services which ease housework, automotive, radio and TV services, the repair and maintenance of household equipment, and construction repair services. To achieve the major change in consumer services for the public it is essential to widely establish progressive forms for consumer services and for improving their quality.

The 1984 State Plan envisages the construction of 72,100 new dwellings. New housing construction will be concentrated chiefly in Sofia, in the large territorial-production complexes and in areas with the least satisfied housing needs. The requirements will be consistently and strictly observed in allocating housing with preference given to the neediest citizens.

Along with the plan a 1984 national State Budget was approved. This is organically linked to the plan, derives from it and is the basis of our economic and social development in the following year. A significant portion of the capital investments planned for the construction of major projects in material production is to come from the budget. The budget has allocated over 2,786,000,000 leva to finance the development of non-material production, that is, education, science, culture, public health, physical culture and sports. Public works and the municipal economy will undergo further development. Over 35 percent of the capital investments allocated to the okrug people's councils for the municipal economy will go into water supply for the population points. Next year, water supply will be improved in the cities of Varna, Pazardzhik, Smolyan, Shumen, Chirpan and others.

### III

The State Plan, in being fully provided and balanced in terms of resources, has the force of law and its fulfillment is a primary obligation for the party, state, economic and public bodies and organizations. Our nation has made it a practice to work out and approve counterplans for the economic organizations. One of the most essential traits in a counterplan is that is "...is inseparable from the state plan. Precisely the state planning quotas are the basis on which the counterplan is formed for each economic organization in our country."<sup>4</sup> Counterplanning, in spite of certain shortcomings in carrying it out, has proven

its vitality and has become an exceptionally important factor in national development. The counterplans disclosed significant reserves which contributed to the fulfillment of a number of indicators in the Eighth Five-Year Plan and to bringing economic and social development into accord with the decisions of the 12th Party Congress.

Of exceptional richness in theoretical terms and of great practical importance for improving our planning activities is the idea of Comrade Todor Zhivkov that "the new approach to counterplanning reflects the new functions of the economic organizations and their labor collectives as the true masters of socialist property."<sup>5</sup> The counterplan and its fulfillment guarantee the complete self-support of the economic organizations and are a powerful lever for the economic realization of socialist ownership.

The demands placed on the 1984 counterplans are great but feasible. This is caused by the comparatively high indicators in the State Plan and by the complex international situation in which the nation's economic development will occur. Hence, even this year the necessary prerequisites have been created for developing counterplanning fully and for actually applying the theoretical and methodological ideas of Comrade Todor Zhivkov on the elaboration, approval and implementation of the counterplans. The state plan was approved on time. With the active involvement of the economic organizations, the state planning quotas have been adjusted and work instructions have been approved with the worker proposals in counterplanning.

The elaboration and acceptance of the counterplans by the economic organizations has entered the final phase. This poses with even greater acuteness the basic problems which must be resolved in the counterplans. What are the most important of these?

In the first place, the counterplans must disclose reserves so that each collective and each economic organization can achieve the indicators set by the Law Governing the Unified Socioeconomic Development Plan of Bulgaria during the Eighth Five-Year Plan and the Theses of the 12th Party Congress. To a very great degree the outcome of the five-year plan as a whole and the fulfillment of the congress decisions are predetermined by the 1984 counterplans. Each collective must start the new year with a clear and sound goal of fulfilling and overfulfilling the indicators set for the fourth year of the Eighth Five-Year Plan.

Secondly, a rise in labor productivity is to be at the center of the counterplans. The increase rate of social labor productivity up to now has been unsatisfactory. All the reserves disclosed in the counterplans must ultimately bring about the attaining of the labor productivity envisaged in the five-year plan. Along with the introduction of new, more productive equipment and production methods the organization of work and discipline are a major reserve. Discipline--planning, labor, production, financial and state--is a factor for significantly increasing labor productivity. The party's bidding at present is: the observance of discipline must be turned into one basic criteria for a social assessment of individual and collective labor through wages, through promotion and through spiritual encouragement. A rise in labor productivity must be directly tied to a reduction in manual labor and the number of persons employed in material production.

Thirdly, at present the party places at the center of economic and social policy an improvement in product quality as the basic factor for increasing the effectiveness of social production.

By the counterplans to the National Party Conference, maximum results must be attained in improving product quality. They must contain realistic and concrete solutions on improving its quality.

Each collective, economic organization and ministry must report to the party conference not with ideas and organizational measures but rather with concrete achievements in improving product quality.

Fourthly, the economic and effective use of raw material and energy resources is the basis for the resources needed in the counterplans. The main task in this area is to achieve a tangible reduction in material expenditures per unit of product under that envisaged in the state plan. This requires that the engineer plans introduce new material- and energy-saving production methods, that Bulgarian and foreign advanced experience be established and rejects and poor quality not allowed.

Fifthly, in the area of the standard of living, particular attention is to be given to housing construction and the development of consumer services. The normative and legal conditions are present for unleashing the broad and effective initiative of the labor collectives in housing construction. This must be specifically measured in the counterplans.

The next year must become a turning point in the development of consumer services. The comprehensive territorial plans and the counterplans of the enterprises contain real measures for carrying out the instructions of Comrade Todor Zhivkov at the Sliven Conference concerning the accelerated development of consumer services for the rapid dissemination of advanced experience, creating service companies under the leadership of the obshtina people's councils, bringing the services closer to the consumer, widely disseminating the progressive forms of consumer services and decisively improving their quality.

Sixthly, the elaboration, adoption and fulfillment of the counterplans are to be carried out in full accord with the new economic approach and its mechanism. The incentives and sanctions envisaged in the Decree No 20 of the Council of Ministers are an important factor for adopting effective 1984 counterplans.

Ideological work by the party organizations, the Bulgarian Agrarian Union, the Bulgarian Trade Unions and Komsomol is an essential condition and substantial factor both for working out the counterplans as well as for their fulfillment in accord with the party requirements. In this regard, several major tasks have been set out.

Ideological work must be based on a profound study of the theoretical and methodological ideas and views of Comrade Todor Zhivkov on state planning and counterplanning. They are to become a guide for action for the labor collectives and for the personnel of all levels.

Using the means of ideological activity, the state quotas must be brought to each collective, worker and specialist and the conviction of the possibilities for their overfulfillment must be formed.

Ideological work must constantly ignite the flame of initiative and creativity of the workers to disclose the reserves and put them into work in the process of carrying out the counterplans.

A study of the speech of Comrade Todor Zhivkov at the Varna Meeting and his lectures to the faculty and students of the AONSU show the concrete and real opportunities for turning ideological work into a powerful factor for elaborating effective counterplans and for overfulfilling the 1984 State Plan.

The jubilee year of 1984 requires the full mobilization of our forces and a new rise in the talent and daring of all workers to overfulfill the plan and to properly greet the National Party Conference and the 40th anniversary of the socialist revolution. This is a solid guarantee for achieving new, greater successes in the economic and social development of Bulgaria and for raising the standard of living of the people.

#### FOOTNOTES

<sup>1</sup> T. Zhivkov, "Nyakoi aktualni problemi na tsialnata politika na partiyata. Treta lektsiya" [The Development of Socioeconomic Relations and National Economic Management. Second Lecture], Partizdat, 1983, pp 40-41.

<sup>2</sup> Ibid., p 43.

<sup>3</sup> Ibid., p 42.

<sup>4</sup> Ibid., p 46.

<sup>5</sup> Ibid., p 45.

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BULGARIA

ECONOMIC ASPECTS OF PARTY'S SOCIAL POLICY

Sofia POLITICHESKA PROSVETA in Bulgarian No 11, 1983 pp 25-31

[Unattributed article: "Certain Timely Problems of Party Social Policy"]

[Text] The third subject of the lectures given by Comrade Todor Zhivkov to the students and faculty of the AONSU [Academy for Social Sciences and Public Administration] caused pronounced interest. This is explainable as here the General Secretary of the BCP Central Committee examined the vital questions of our social policy.

As is known, these problems hold a key place in the integrated strategy of the BCP. "Everything for man, everything for the sake of man" is the program motto and the highest principle which stems from the communist ideal and from the party's struggle for the well-being of the people and the all-round development of the individual.

Party social policy involves not only the interests of the people and social groups as a whole but literally the interests of every family and every person. It reflects the vital activities of people in all collectives and in each population point and it shows visibly the advantages of socialism and its highly humane essence. But here as well there are unsolved problems and difficulties on which anticomunist propaganda speculates. All of this has given the subject important psychological significance.

The aim of the exercise is to explain to the students the essence of party social policy, its basic principles and actual ways for carrying it out. Along with its cognitive role, this requires that the exercise play an ideologically shaping and socially activating role. The designated goals can be achieved only if the material is presented to the audience profoundly, analytically and convincingly. For this reason the propagandist must carefully analyze the theoretical and actual material, be able to skillfully link this with life, clearly show the achievements of our people and convincingly answer the arising questions. The main thing is to disclose the scientifically sound nature of the BCP April social policy and to show that this expresses the interests of the workers and its realization is a cause for all the people.

The exercise can be carried out according to the following plan:

1. The essence, goals and tasks of social policy under socialism.
2. Basic principles and directions of BCP social policy.
3. Practical approaches to implementing social policy.

It is essential to explain to the students the concept of the "social" in the broad sense as relating to society and differing from the natural and in the narrow sense as a certain aspect or facet of society (see K. Marx and F. Engels, "Soch." [Works], Vol 13, pp 8, 493; Vol 17, pp 445, 550; V. I. Lenin "Subr. soch." [Collected Works], Vol 36, p 130, Vol 40, p 193).

The social sphere of social life is a complex of relations between people and their communities and determined by their material and spiritual needs as well as the aggregate of conditions in which these relations are carried out and developed. The basic elements of this sphere are:

- a) The socioclass structure of society, the processes of its development, the relations of equality and inequality between people and their communities over the question of their status and role in society;
- b) The methods of forming and satisfying the material and spiritual needs for the members of society, the needs and interests of the different components of the social structure;
- c) The forming and developing of the way of life of the individuals, families, classes and other social communities;
- d) The development of the individual, his abilities, activeness and involvement in social activities.

The various spheres of social life are organically interconnected. Most often social aspects can also be discovered in a given phenomenon or process where, for example, economic or political aspects are predominant. With good reason wide use is made of the concepts of "socioeconomic" and "sociopolitical" (processes, relationships and phenomena).

As can be seen, the object of social policy is the processes which comprise the aspect of social development as a whole. They are organically linked to the economic, political and cultural processes, they develop under their influence and at the same time have a significant inverse effect on them. The control of social processes and of social development comprises the content of social policy.

The nature of social processes and, consequently, of social policy is determined by the social system and primarily by the nature of production relations. In this regard, a description of social policy under capitalism and under socialism must be provided.

In a capitalist society, the social policy of the state serves the bourgeois class as a means for broadening the exploitation of the workers and for strengthening its domination. To the degree that social measures exist in the

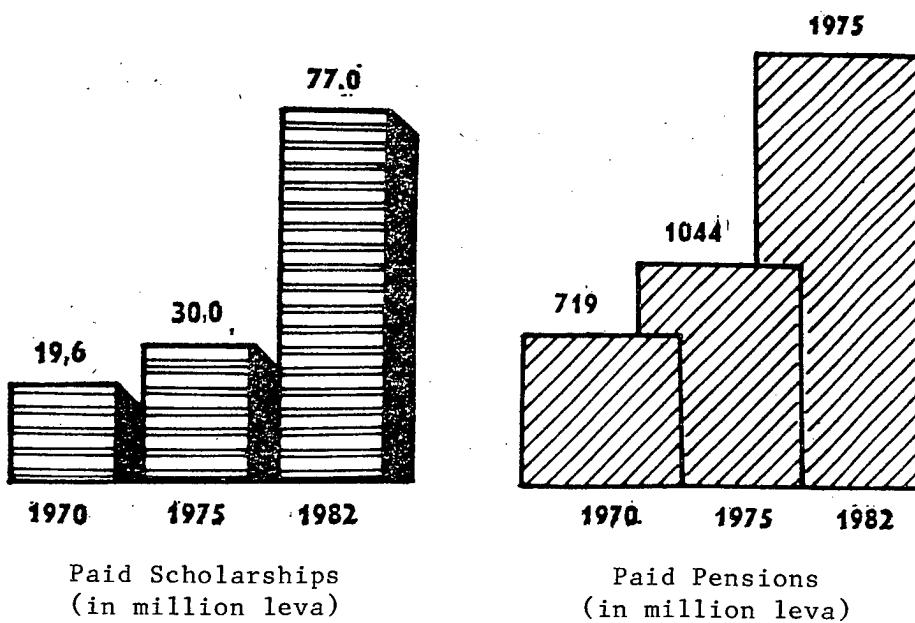
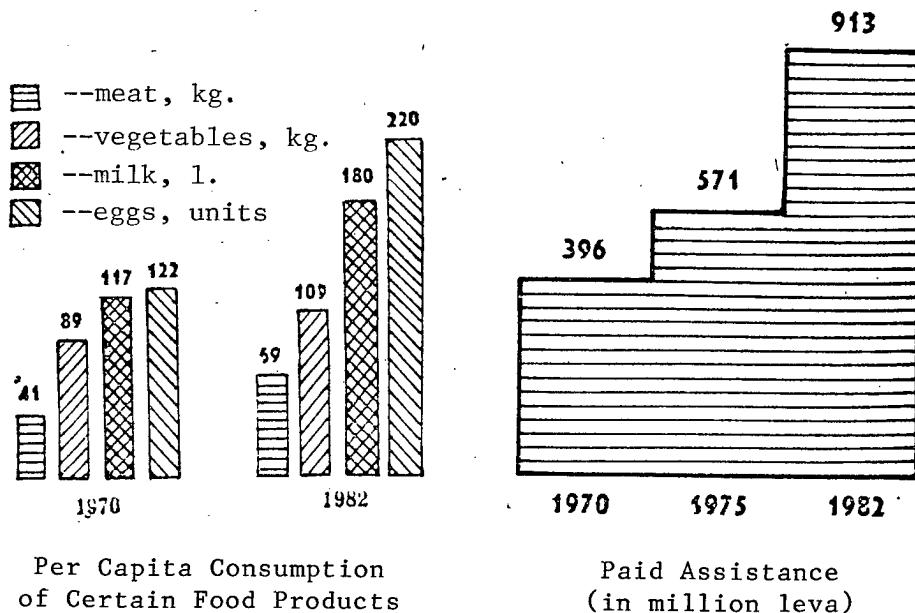
area of wages, social security (assistance for the unemployed, sick, disabled and so forth), in the development of education, environmental conservation and so forth, they are actually an attempt by the capitalists to maneuver when confronted with the strong pressure of the workers and to mitigate their protest against exploitation and lack of rights. Actually the masses of people achieve victories in the social area in a harsh class struggle. The conclusion is that in its essence social policy in the capitalist nations has an antipopular nature. Capitalism freezes social progress, it creates for the workers a constant insecurity for tomorrow, it reduces their standard of living and devastes the spiritual life of the people (as proof of this it is possible to point to the data from the information published in this issue "Two Systems--Two Social Policies").

All of this contrasts with the facts and processes under socialism. Socialist social policy differs fundamentally from the bourgeois in terms of content and principles, goals and tasks, forms and methods of realization. As a purposeful and planned activity, the social policy of a socialist state is aimed at regulating the processes of the distribution and consumption of material and spiritual goods in the aim of achieving the principle of social equality and concern of society for man in each stage of his life, from childhood, during the period of labor activity, during sickness and in old age. (See the diagrams on the following pages.)

One of the most important tasks of our party's social policy during all stages of socialist construction has been to raise the prosperity of the workers, to improve the working and living conditions and to evermore fully satisfy the constantly growing material and spiritual needs of the people. The December 1972 Program, as broadened and enriched by the decisions of the 12th Party Congress for evermore fully and completely satisfying the material, social and spiritual needs of man is being successfully carried out. In spite of certain difficulties caused by bad weather conditions, by the increased cost of raw materials and the arms race imposed by imperialism, the party has ensured the stable development of production and has not permitted a reduction in social expenditures. Conversely, the data show a rise. In 1982, in comparison with 1970, national income increased from 10.5 to 22.8 billion leva while real income rose by more than 60 percent. During the same period average annual wages rose from 1,486 to 2,365 leva, while the public consumption funds reached a total of 6.0 billion leva or on a per capita basis 734 leva in comparison with 285 leva in 1970. As a result of the increased purchasing power, commodity turnover in retail trade increased from 5.6 billion leva in 1970 to 13.3 billion leva last year. Expenditures from the state budget on sociocultural measures over the last 10 years have tripled, reaching around 5.5 billion leva in 1982 (for more detail see "Statisticheski spravochnik" [Statistical Reference], Sofia, 1983, pp 156-222; RABOTNICHESKO DELO of 30 September and 1 October 1983 where the reports and laws have been published on the 1984 Bulgarian unified national economic plan and budget).

It is essential for the propagandist to take up the particular features of BCP social policy under the conditions of building developed socialism. First of all the immediate tasks and ultimate global aims of social policy are coming closer together. Large-scale measures are being put on the agenda and social programs are being carried out for which conditions previously did not exist or

they were spoken of as a remote future. For example, there is the question of basically creating a classless structure of society even within the historical limits of developed socialism, of involving all the workers in the management of social affairs, of forming a well rounded individual and so forth.



In explaining the problem of the second basic question, it must first be emphasized that BCP social policy is based on strong principles and conforms to the action of the objective laws of socialism. This is characteristic for the period since the April 1956 Plenum when the party under the leadership of Comrade Todor Zhivkov eliminated voluntarism and placed its policy on a scientific basis.

In his third lecture, the party general secretary, again with theoretical profundity and a wealth of arguments, analyzed the basic guiding principles and areas of BCP social policy at the present stage. The first, underlying principle formulated by him relates to a correct combination and organic correlation of economic and social goals in social development. From the standpoint of this concept, it is essential to more widely show the dialectical link, unity and relative independence of economic and social policy. (See N. Tikhonov, "The Unity of Economic and Social Policy Under the Conditions of Developed Socialism," in PROBLEMI NA MIRA I SOTSIALIZMA, No 1, 1982). The main thing to emphasize is that BCP social policy, as Comrade Todor Zhivkov stressed, is set depending upon the nation's economic development. This means that in order to carry out the task of fully satisfying the increased material and spiritual needs and to carry out the presently set greater social goals, it is essential to achieve higher labor productivity, more national income, to tangibly increase production and improve product quality. In brief, the degree of satisfying needs depends upon the state of the economy. As was aptly put by Comrade Todor Zhivkov, we can place on the table only as much as we have produced, only as much as we have created.

On the other hand, it should be pointed out that economic development itself and the realizing of the production and economic goals in turn are influenced by social policy. In pointing out this dialectic, the propaganda must logically decipher the interesting idea of Comrade Todor Zhivkov on the diverse nature of this interaction, that is, social policy must not be reduced solely to the problem of the standard of living, however important this may be. At present, there is the equally important problem of "turning social policy into an active factor, into the driving force for the development of the material and technical base and for the intensification of the economy" (T. Zhivkov, "Nyakoi aktualni problemi na sotsialnata politika na partiyata. Lektsiya treta" [Certain Urgent Problems of Party Social Policy. Third Lecture], Partizdat, 1983, p 11). In relation to this problem, it is wise to unmask consumerism or the desire to view social policy from just one aspect, that is, to receive without giving.

The second principle of our social policy relates to socialist social equality and social justice. The attention of the listeners must be drawn to the concept of equality in order to be able to analyze the problems of distribution.

In equalizing people in relation to the means of production and in turning labor into the sole measure of income, socialism due to a number of objective factors (the nature of labor, the comparatively low degree in the development of production and so forth) does not automatically eliminate the inequality in income and consequently, in consumption. Each social system has its inherent method of distribution. The principle of distribution according to the quantity and quality of labor, while not the highest is the only possible one at the present stage. Without it and outside of it there can be no socialism and it is impossible to achieve communism.

This thought of Comrade Todor Zhivkov can be established on the basis of both theory and practice. It is particularly important to point to the harm of wage leveling, parasitism, greed, profiteering, parasitic consumption and other phenomena which distort or violate the socialist principle of distribution. These problems have a pronounced ideological aspect because they are linked

with ideals and goals, with the purpose and content of human life. From them the generalization can be made that a rise in consumption must be only one of the conditions for the spiritual enrichment and flourishing of the individual.

Party social policy demands that the rise in the standard of living conform to the increased purchasing power of the workers and that purchasing power itself be primarily in accord with the quantity and quality of invested labor. This notion means that the prime source of income for the population is labor remuneration (wages) while the second is the public consumption funds. The new feature in wages under the conditions of the new economic approach comes down to three things: in the first place, wages are made more dependent upon the quantity and quality of labor; secondly, they are to increase depending upon the production results; thirdly, they are to be turned into a dependent amount.

As for what is most characteristic of the new approach in the forming and use of public consumption funds, this is a focus on decisively raising their economic and social effectiveness. In the future, a significant portion of these funds will be spent according to need, regardless of their direct relationship to the quantity and quality of labor. For example, in the area of public health, education and social assistance. However, in all instances the public funds must not undermine the principle of material self-interest. The question has been raised of increasing their role as a factor which will encourage the involvement of people in labor and creativity. In practice this means that in their use preference will be given to those who work better. Here arise also the questions concerning the rights and responsibilities both of the central state bodies and public organizations as well as those in the conurbation systems and the labor collectives.

The third guiding principle of social policy involves the guaranteeing of social security for all members of society. In this area in first place stands the question of creating the best possible conditions for the development of the younger generation. As a result of the party's concern, we will be able before the end of this five-year plan to place all children from the age of 3 to 6 in nurseries. However, life shows that other solutions are also required. For example, the question is being studied of creating better conditions for caring for children up to the age of 3 at home, of lengthening paid maternity leave, of better protection of pregnant women and so forth. Certain new problems have also arisen related to the attitude toward people of pension age. It must be emphasized that pension coverage in Bulgaria is one of the most progressive in the world.

In spite of all of this, there are things to be done in this area. For example, there is the problem of providing employment for able-bodied persons of pension age, without disrupting the natural professional and social development of young people. Here we must discover under what conditions and in what spheres of activity it is advisable to direct people after their retirement.

One of the central questions is the providing of housing for the population. This problem has assumed a certain acuteness primarily in the large cities. Attention has been focused on the construction of new housing with 850,000 units being built before the end of 1990. Along with this there is also the question of the more equitable allocation of housing. Finally, one can note a new

approach in solving the housing question, namely step-by-step, in accord with the number of family members; the preferential meeting of housing needs of young families; involvement of the population in the finishing work on housing; the fuller utilization of the available housing and so forth.

In reviewing the contents of the third basic question, it is essential to emphasize the contribution of Comrade Todor Zhivkov in working out the practical approaches to realizing party social policy. In considering the prime importance of primary needs, he pointed out that in first place in the practical approaches is the question of increasing the diversifying the production of consumer goods and more fuller developing the trade network. In bearing in mind the difficulties and weaknesses, it can be emphasized that here control and supervision, as a purely subjective factor in the solving of this problem, move to the forefront. The increase in volume and the diversification of product assortment must be carried out in accord with the changing needs of the people. In practice this means that we must study consumer demand while the contractual system must become an active factor for higher quality of the goods and for more completely coordinating production and trade. The self-supply system, which one can describe with its successes, difficulties and negative aspects, is to play an important role in carrying out the tasks of a more rapid rise in the commodity stocks in relation to the purchasing capacity of the public.

The second area in the practical approaches of social policy involves another type of demand which is also vitally important for people but is satisfied through services in the broad sense of the word. It is interesting to note that the service sphere is interpreted as an important factor in improving the personal element of the productive forces. The positive and negative aspects of public health, mass physical culture, administrative and other services are viewed through this prism. At present, the basic requirements are to improve the quality of the services, in bringing these activities closer to the place of employment and residence of the citizens. In practical terms the further development of services depends upon two things: the building of technically better furnished facilities for services and increasing the number of persons employed in this sphere by 50-60 percent over the long run.

A third important area at which BCP social policy is directly aimed is the needs of the workers in the labor sphere. It may seem that the changes in the material and technical working conditions are unsatisfactory. Manual operations and unattractive labor exist and these do not create the necessary sense of well-being and they damage the feeling of human dignity. The party has raised the question of radically resolving the problem of really humanizing working conditions. This problem is of particular importance for the younger generation which has higher requirements.

Comrade Todor Zhivkov also took up another, fourth problem in the actual realization of social policy. This relates to manpower skills, to the development and growth of the individual, and to the creating of social conditions which would guarantee each worker his intellectual and professional development, which would increase his material remuneration and broaden his involvement in social life. One new problem in this area is to provide human progress at the same job. The solving of this group of questions will increase the social optimism of the socialist personality.

In conclusion it must be emphasized that social policy in a socialist society is an expression of true humanism and social justice. It serves only for man and his all-round development. This is its great advantage.

BCP social policy conforms to the interests of the people and each member of society. Further successes in its realization depend upon the conscientious, efficient labor of every collective and each individual citizen. The economic organizations and enterprises are confronted with responsible tasks in line with the 1984 plan. They are granted greater rights and correspondingly they have great responsibilities in the area of social policy. This is so because a large portion of these problems is resolved in the labor collectives. The efforts must be focused on realizing the goals set in the socioeconomic plans on all levels. This is a guarantee for a better life and for greater prosperity of each person in our motherland.

The following questions should be raised for discussion: 1. What expresses social policy and what are its goals and tasks under socialism? 2. What are the particular features of BCP social policy in relation to the principles and approaches to its realization at the present stage?

As assignments for specific studies and reports by the students, the following questions can be raised: What problems are solved by the social development plan of a labor collective? Is there is link between the production and social programs of the enterprise? Does the formation of wages at the enterprise conform to the principles of party social policy? Do the working conditions conform to the requirements of social policy? How are the public consumption funds employed and what is the participation of the collective in their allocation? Why is social policy in the capitalist nations contradictory to worker interests?

In studying the subject, primary attention is to be given to the primary sources indicated in the curriculum. Additional material can be found by the propagandist and the students in the following publications: Ya. Vakrilov, "Ikonomicheska i sotsialna politika pri sotsializma" [Economic and Social Policy Under Socialism], Partizdat, 1980; "Sotsializmut i narodnoto blagosustoyaniye" [Socialism and the Well-Being of the People] (Chapter VIII), Sofia, Nauka i izkustvo, 1978; T. Pachev, "Social Policy and Management," POLITICHESKA PROSVETA, No 6, 1983. To help the propagandists in this issue we are publishing the reference material "Two Systems--Two Social Policies." As visual aids it is possible to use the given diagrams as well as the film strips on the same subject from the Septemvri Publishing House.

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REPORTS ON INDUSTRIAL DEVELOPMENT, FOREIGN TRADE ACTIVITIES

Cooperation in Machine-Tool Production

Sofia BULGARIAN FOREIGN TRADE in English No 4, 1983 p 13

[Article by Eng K. Naidenov]

[Text]

Bulgaria has been taking an active part in the socialist economic integration in the field of machine tool production. This integration creates conditions for concentration, cooperation and specialization both in building up of the machine tool production equipment and in the manufacturing of the very machines, automatic modules, lines and systems. Working groups of experts plan and design jointly the interface, units and systems to meet the specific requirements of individual partners and for delivery to third markets as well.

One of the mutually beneficial forms of cooperation in this field is the addition of CNC systems made by member countries of the Council for Mutual Economic Assistance (CMEA) to Bulgarian-made machine tools. The perfect example in this respect are the CP161 bar/curcher, the CP503 semi-automatic one-carriage horizontal bed lathe, the MS032 and CM040 special horizontal machining centres, equipped with CNC systems supplied by the USSR, Hungary and Czechoslovakia. These machines are being exported to the above countries who undertake the maintenance and service of the machines delivered. Subject to special

agreement the machines equipped in this way are offered to markets in third countries as well.

Another form of extending the integration in the field of machine tools is the joint manufacture of automatic modules. They consist of machine tools made by CMEA member countries, whereas the transfer load/unload systems — robots, manipulators and conveyors are being developed and supplied by Bulgaria. The equipment of the machine tools has been developed and manufactured in Bulgaria too. It includes high-torque motors, cable guide chains, turret heads, lubrication systems and chucks. All this ensures conditions for an efficient specialization and opportunities of launching effective export drives on third markets. In this case Bulgaria plays the role of main designer and supplier. The automation modules and lines are designed by Bulgarian organizations on the basis of specifications agreed upon with the respective buyer country. The production is materialized by teams of specialists of both partners, supervised by Bulgarian experts, who are responsible for the set up and the commissioning.

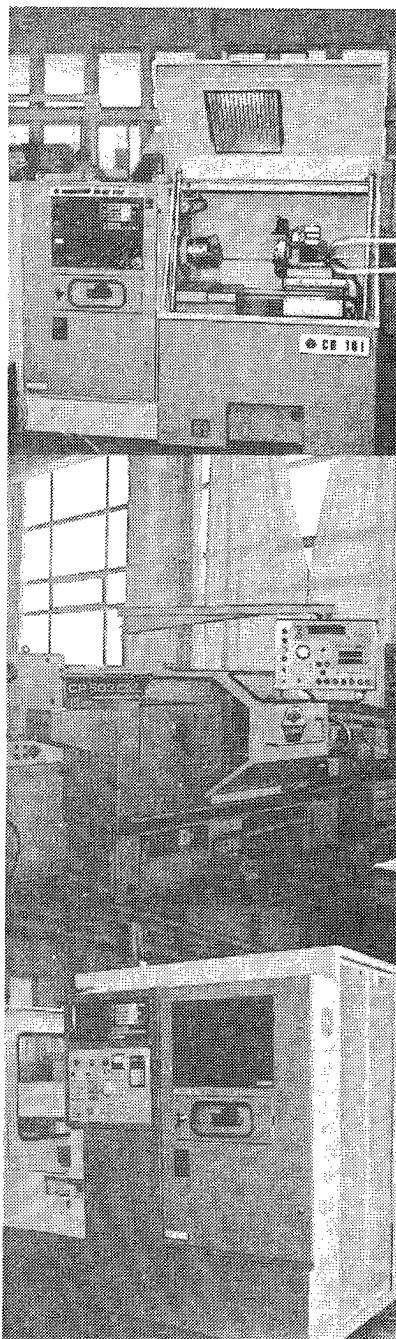
Hundreds of Bulgarian-made manipulators and robots have been

functioning efficiently in the Soviet Union, the German Democratic Republic and in scores of other countries as a result of successfully fulfilled long-term programmes. Joint solutions of production lines have been implemented in the KAMAZ giant automotive plant in the USSR and in a lot of other plants in the countries of the socialist community.

**EXPORTER:**

**MACHINOEXPORT**

Foreign Trade Engineering Co.  
5 Aksakov St.  
Sofia, Bulgaria  
Telex: 23425, 23426



*Bulgarian machine tools SP 161, SP 503 and MS 032 come with microprocessor control systems, a product of the CMEA member-states*

## Cooperation With GDR

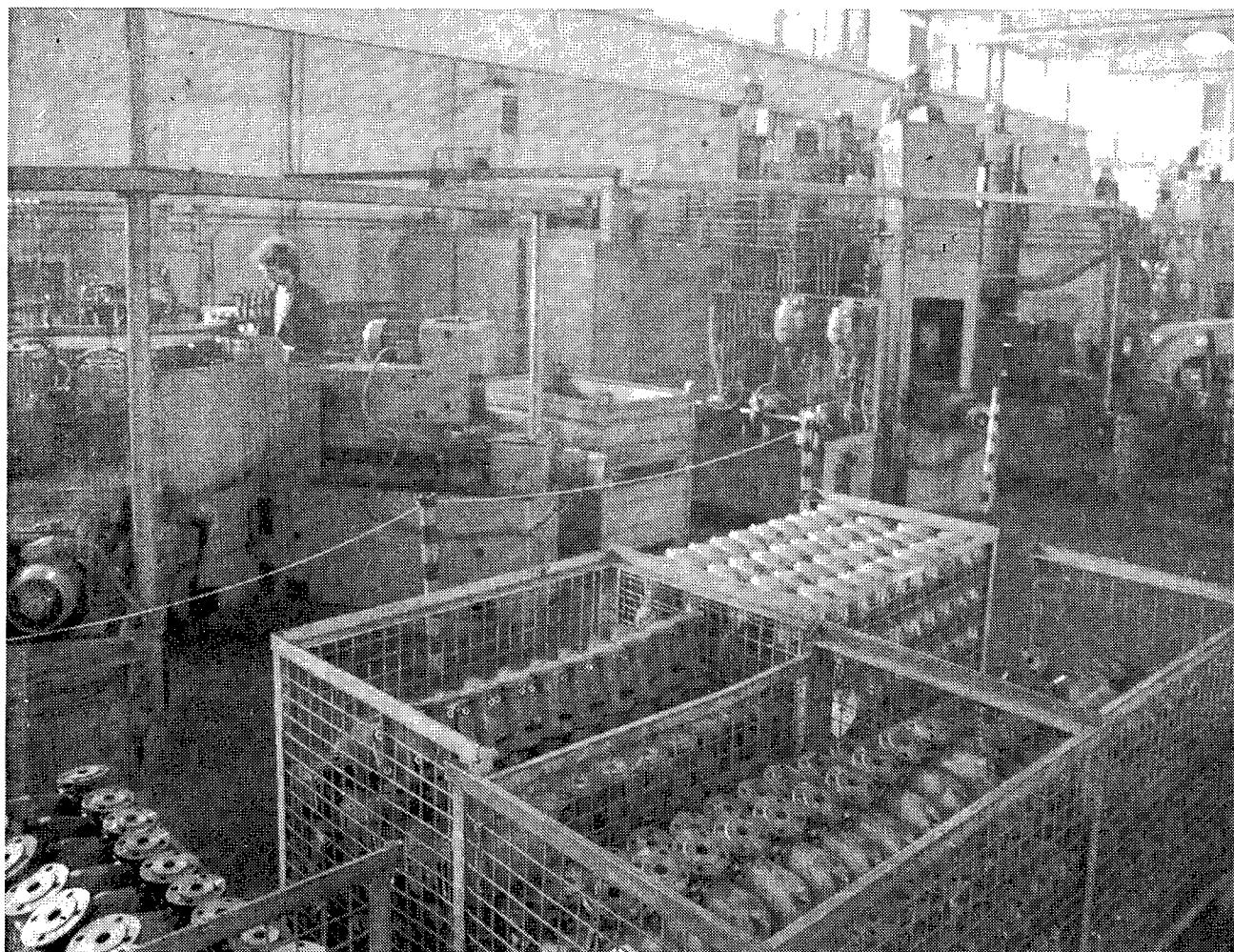
Sofia BULGARIAN FOREIGN TRADE in English No 4, 1983 pp 14-16

[Article by Z. Dimitrov]

[Text] The German Democratic Republic is one of Bulgaria's foremost trade partners. Most indicative in this trade are the continuous structural changes which are a result of the successful socialist international division of labour within the Council for Mutual Economic Assistance (CMEA). Thus, for instance, machinery, equipment and means of transport, which in 1960 accounted for a mere 3 per cent of Bulgarian exports to the GDR, came up to 56 p.c. in 1980, while agricultural produce diminished during this period from 87 to 28 p.c. of the total.

Specialization and cooperation are coming to play an ever more important role in Bulgaro-GDR trade, especially in the sphere of mechanical and electrical engineering, electronics and chemistry. This process started in the second half of the '60s. As a result, specialized products exchanged between the two countries have increased from roughly 6 per cent of the total in 1966 to about 23 p.c. in 1982.

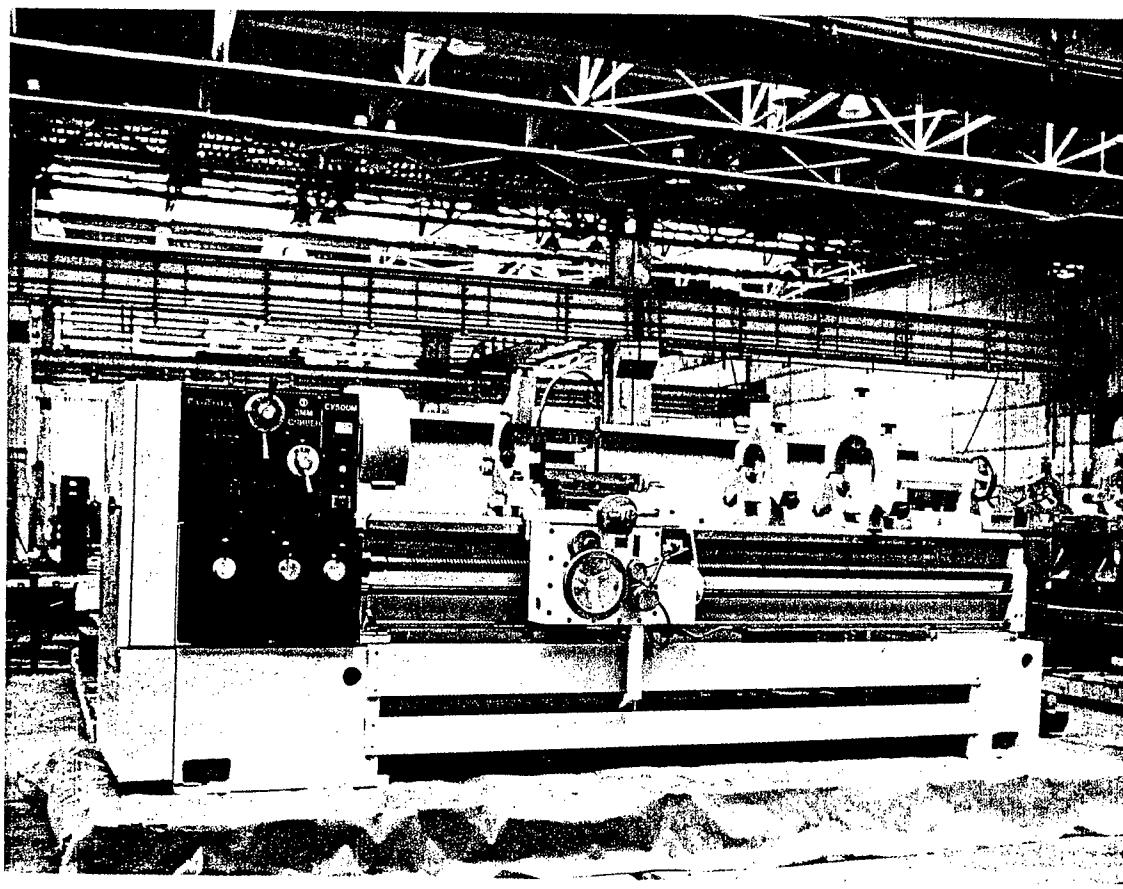
The coordination of the national economic development plans also involved a coordination of trade and services to the tune of 5,000 million rubles



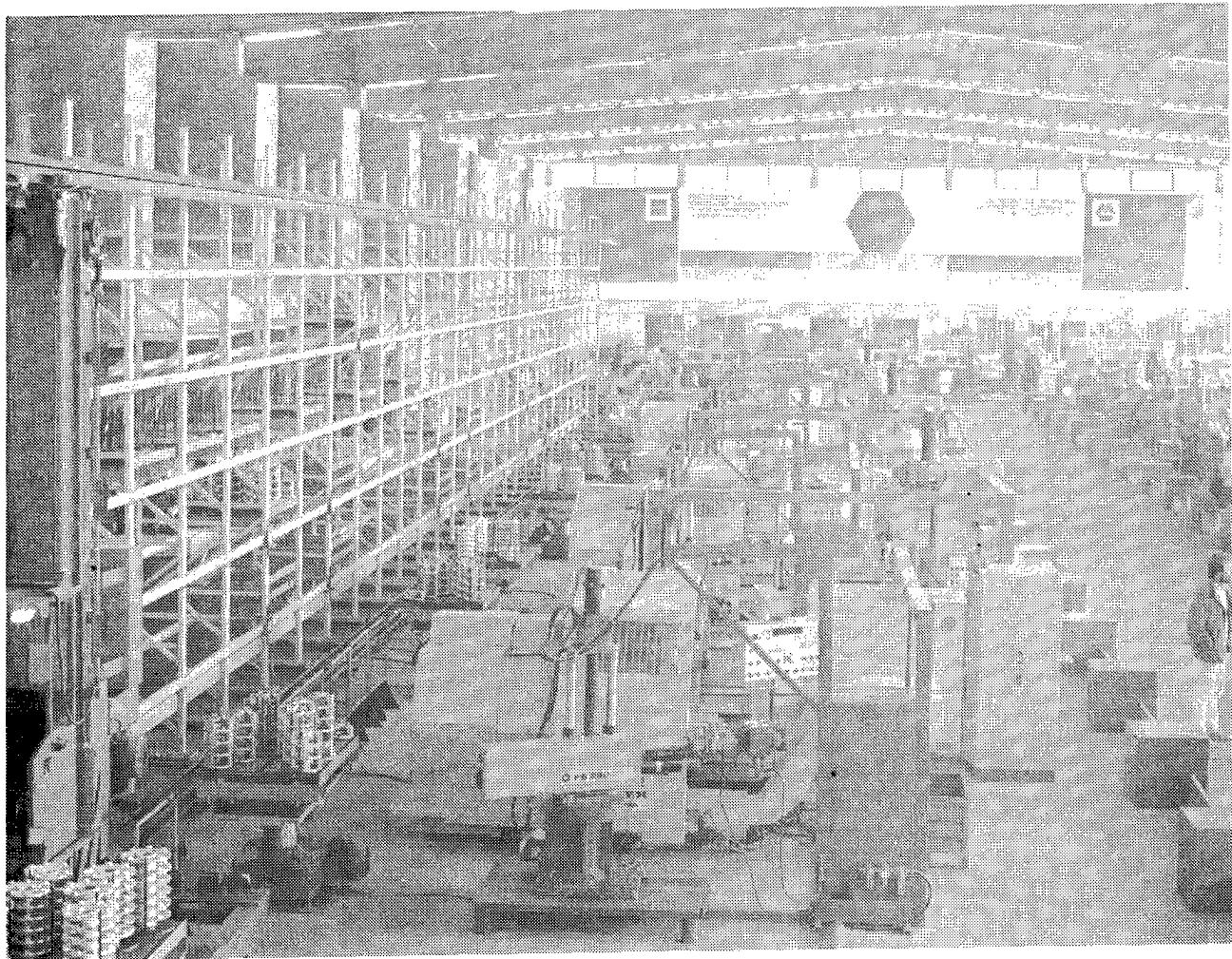
during 1981-85, marking a 40 p.c. increase over the previous five-year plan (1976-80).

The growth rates of mutual trade are now determined chiefly by the exchange of electronic and engineering (both mechanical and electrical) products. By 1985 these products are expected to come up to about 63 p.c. of Bulgarian exports to the GDR.

Mutual deliveries of specialized products are to keep on increasing, from Bulgaria: electric trucks, machine tools, woodworking machines, cooling aggregates, computer technology, scales and gauges, instruments and pharmaceuticals; and from GDR: equipment for open-cast mines, machine



*Bulgarian aggregate machines, lathes and automatic modules function in quite a few machinebuilding plants in GDR*



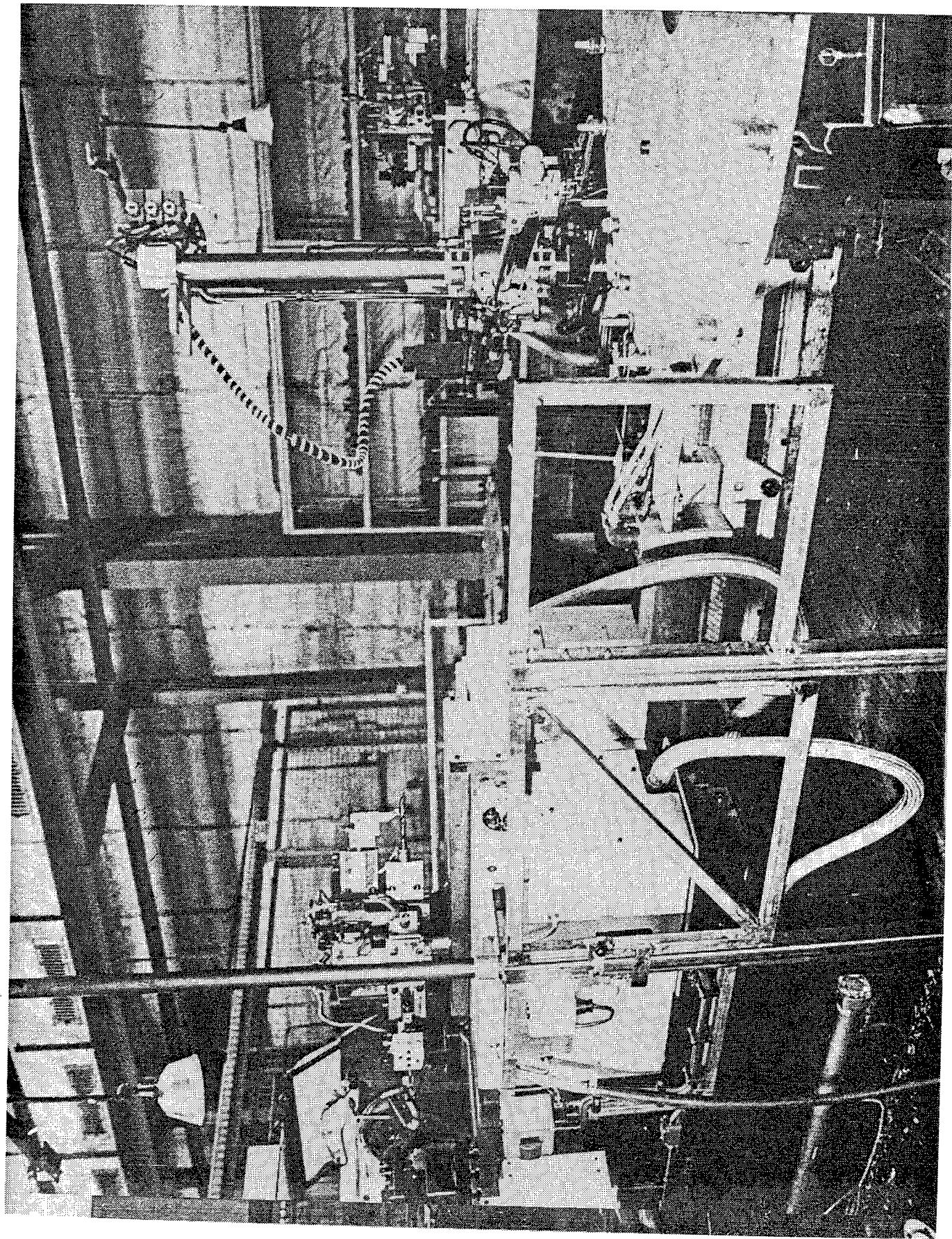
tools, forging presses, smelting, agricultural and other machines, computer technology, high- and low-voltage apparatus.

Cooperation in production, which during this period is closely linked to the development of the Bulgarian heavy engineering plants now under construction, is likewise assuming growing importance. A case in point is the cooperation in the production of equipment for open-cast mines to be installed in the Maritsa-East energy complex. In connection with the construction of a steel plant in Bourgas, the heavy engineering plant in Radomir is to produce part of the equipment for the mill 300 for fine rolling imported from the GDR. Cooperation in the production of metallurgical equipment is to be extended.

In both countries the strategic task is to intensify national production, especially by way of scientific and technological progress. Long-term collaboration programmes are being implemented with common efforts in such key spheres as microelectronics, robotics, highly efficient machine tools and processing centres, as well as chemical machinebuilding.

Direct links are multiplying. Scores of economic organizations and plants in Bulgaria and GDR are actively collaborating and exchanging knowhow in production, science, technology and management.

The achievements in the economic, scientific and technological collaboration between the two countries augurs well for its further refinement in the years to come.



## Gear-Wheel Cutting Machine

Sofia BULGARIAN FOREIGN TRADE in English No 4, p 18

[Article by Eng I. Dimitrov]

[Text]

This invention implements beforehand the instrument's incision in the billet, which performs a continuous rotatory movement, while the cutting tool's movement is rectilinear. The tool is of the type of a circular gear broach, which permits a continuous gearing and roundabout movement between the instrument and the billet.

The technical solution comes in two versions. In the first version the tool represents a package of gearscooping wheels performing a reciprocating movement and synchronous rotation with the billet's rotation. In the second version the tool comprises gearscooping wheels collected in a package and ensured against overwinding, the interconnected packages forming a conveyor. The gearscooping wheels in every package are so arranged that the gear of each successive wheel is wound vs the preceding one at a magnitude permitting continuous gearing and roundabout movements between tool and billet.

The advantages of the tool consist in that, thanks to the winding of the gearscooping wheels to a certain magnitude, it can be transformed into a conveyor, which increases the productivity and wear and tear of the cutting gears.

The machine for the cutting of gear wheels includes mechanisms for the initial incision of the tool into the billet, for the tool's continuous conveyor movement and for a roundabout movement between cutting tool and billet.

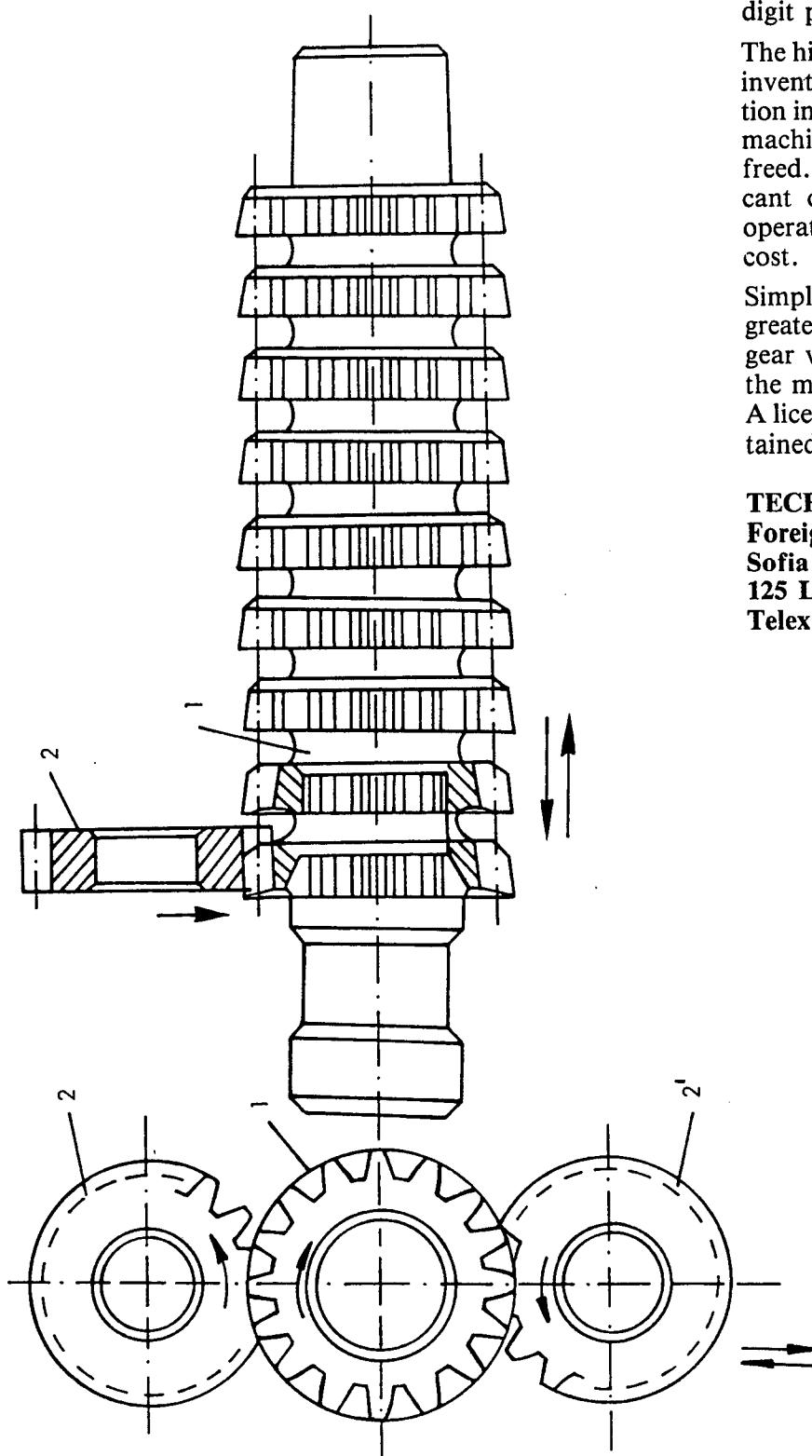
The mechanism for the roundabout movement consists of an engine connected with a unit for attunement and transmitting the movement by means of a worm couple to a table, to which the package of billets is fastened. The

kinematic linkage with the mechanisms for the tool's continuous conveyor movement is secured by means of a digit programming system.

The high economic effectiveness of the invention is determined by the reduction in the number of gearwheel-cutting machines, whereby production area is freed. Lower energy and cooling lubricant consumption, as well as fewer operators make for considerably lower cost.

Simplified construction, reliability, greater productivity, high quality of the gear wheels produced, these then are the main advantages of the machine. A licence for its production can be obtained from:

**TECHNIKA**  
Foreign Trade Organization  
Sofia 1113, Bulgaria  
125 Lenin Boul., Bl. 2  
Telex: 23 278



## Economic Relations With Japan

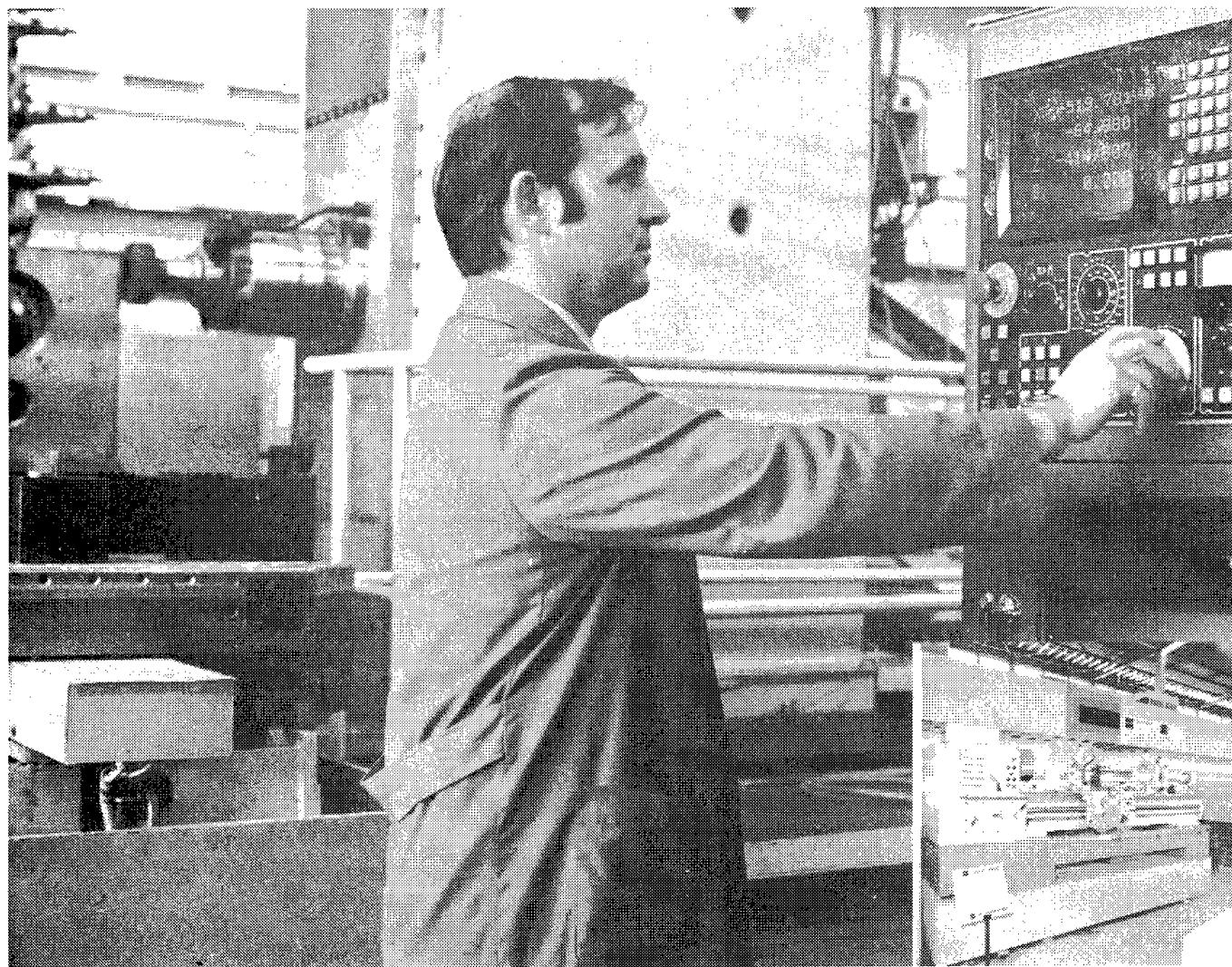
Sofia BULGARIAN FOREIGN TRADE in English No 4, 1983 pp 19-21

[Article by D. Rouyev]

[Text]

Economic relations between Bulgaria and Japan are developing on a solid contractual-legal basis. A major contributing factor to their intensification is the agreement on trade and shipping concluded in 1970, which introduced the most-favoured-nation clause between the two countries.

In 1972 a joint economic committee was set up, whose function it is to promote trade and other forms of economic, scientific and technological collaboration between Bulgaria and Japan and to facilitate mutual acquaintance and extension of contacts between representatives of different



economic sectors. Subsequently a joint intergovernmental commission for economic collaboration in agriculture and fishing was established.

Top-level meetings held in Tokyo and Sofia in 1978 and 1979 respectively were followed by visits of other responsible political and economic personalities. Business talks were held in Bulgaria with the chairmen of the foremost Japanese companies: Mitsui, C. Itoh, Fanuc, Meiji Milk, Kobe Steel, Hitachi Zossen and NSK.

Bulgarian exports to Japan comprise primarily raw and prime materials, as well as goods of agricultural origin: tobacco leaves, broached wine, sterilized preserved fruits and vegetables, silk, leather garments, chemicals and secondary aluminium. In 1981 the percentage of certain chemicals, such as p.v.c. and polypropylene, in Bulgarian exports to Japan increased quite considerably. Good prospects are now opening up for the sale of Bulgarian machine tools to specialized Japanese firms.

The main products imported by Bulgaria from Japan are metals and special steels, pipes, bearings, computer technology and components, spares for ship engines, equipment for complete plant, chemicals, preparations, as well as consumer goods.

Economic, industrial and technological cooperation between Bulgarian economic organizations and Japanese companies began to pick up momentum in 1980, after Japan had supplied Bulgaria with a number of complete plant and installations as well as licences. The foundations for joint engineering activities between firms and organizations of the two countries were laid.

In December 1980 Machinoexport and Fanuc, set up the Fanuc- Machinex Co. with headquarters in Sofia, the first association established in accordance with the regime of Decree No. 535 of the Bulgarian State Council of March 1980. This company renders services and supplies robots, machine centres and machine tools fitted with Fanuc

numerical program devices, designs blueprints for the reconstruction of plants in Bulgaria, and the like.

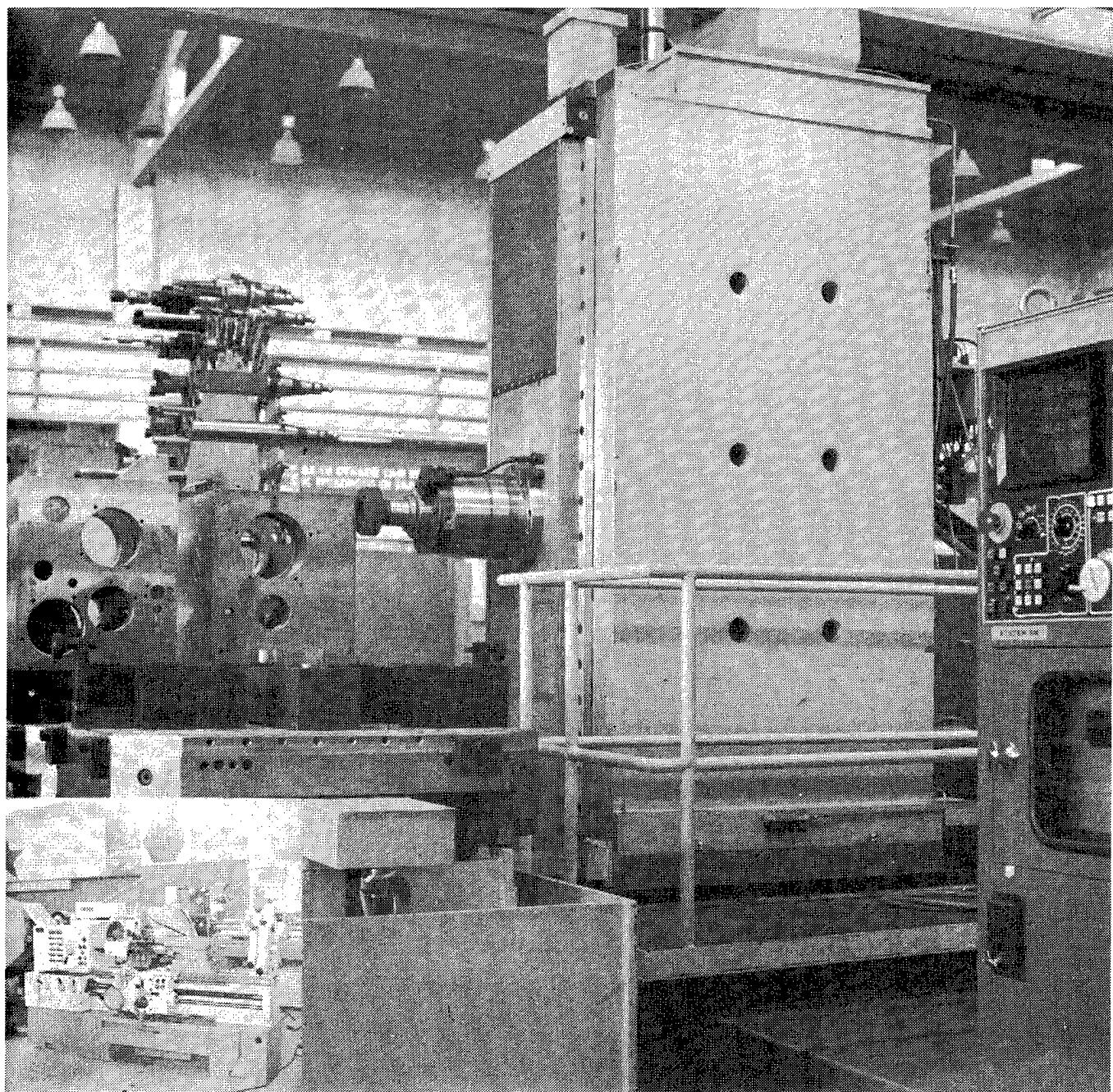
Early in 1981 Atlas Engineering, a joint engineering company with headquarters in Tokyo, was established by Kobe Steel, C. Itoh, Mitsui and Toshiba, representing Japan, and Machinoexport and Technoimport, representing Bulgaria. This joint company is busy preparing blueprints and tenders for the construction of machinebuilding, metallurgical and power generation capacities in Bulgaria as well as in third countries.

At the end of 1981 a second company known as Sofia-Mitsukoshi was created in accordance with Decree No. 535 between several Bulgarian organizations and the Japanese firms Tokyo Maruichi and Sofia Mitsukoshi. Its main functions are to jointly produce and market consumer goods, as well as to design and overhaul department stores.

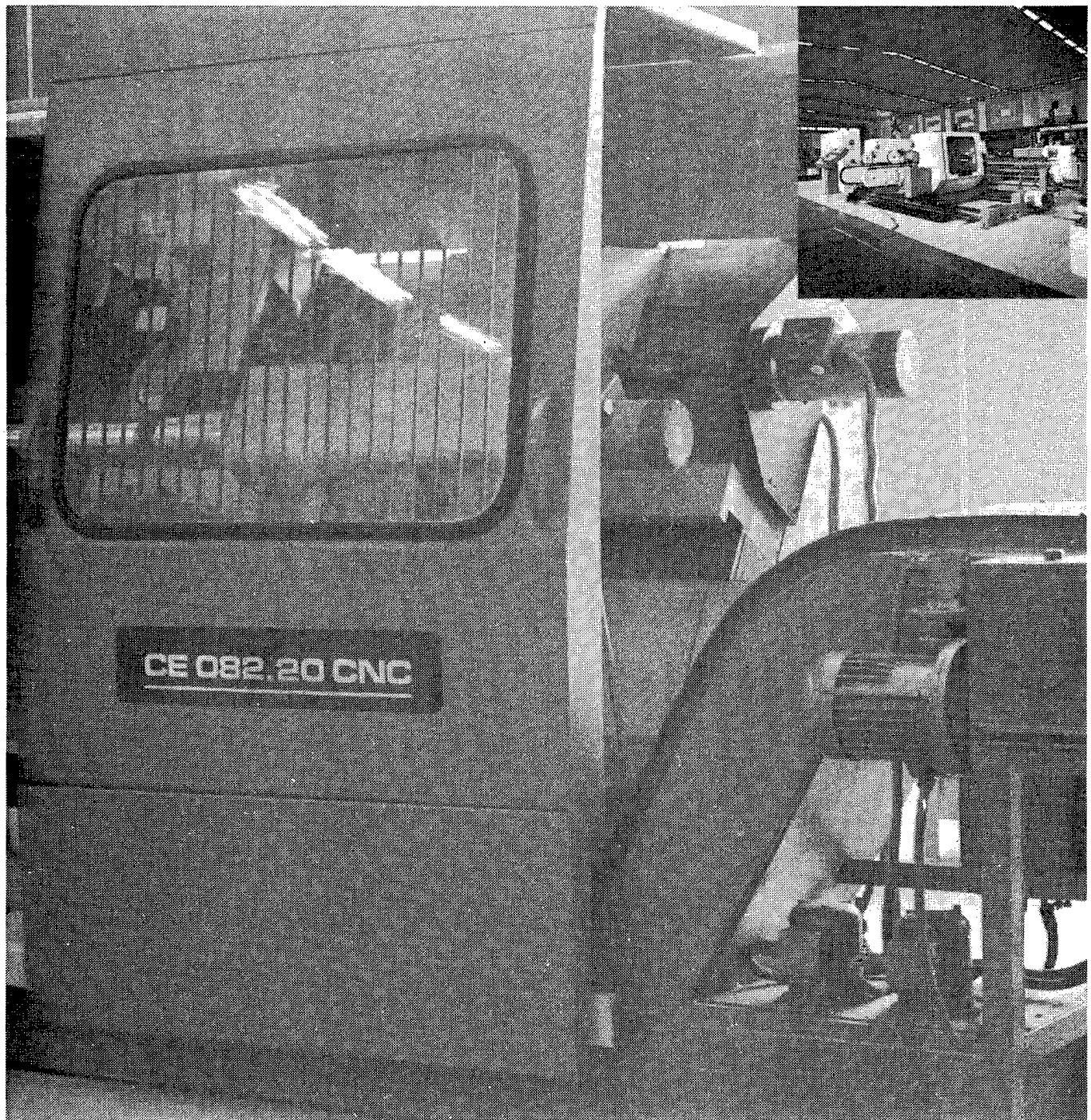
Designs for the reconstruction and updating of several enterprises in Bulgaria are now at the preparatory stage. They provide for the participation of Atlas Engineering and Fanuc-Machinex.

Big Japanese industrial and business groupings are to actively collaborate in the manufacture and marketing of products in the following sectors: heavy engineering, metallurgy, chemical industry, electronics and electrical engineering, high-precision machinebuilding, and energy. General agreements on economic collaboration were concluded in 1976-79 with C. Itoh, Teidjin, Mitsubishi, Mitsui and Marubeni-Fuyo, while with Hitachi and Toshiba agreements or protocols on industrial, research and technological cooperation were signed. Efforts are now being made to bring about effective economic collaboration with Japanese firms in third countries, chiefly by rendering designing and other technical services, building assemblage work, and supply of equipment by Bulgaria.

Economic relations between Bulgaria and Japan may be expected to increasingly develop in future on the basis of joint ventures in industry, research and technology.



*Machinoexport, a Bulgarian foreign trade and engineering company, and the Japanese Fanuc firm jointly provide service and accessories for robots, machine centres and machine tools*



## Machining Center CM 040

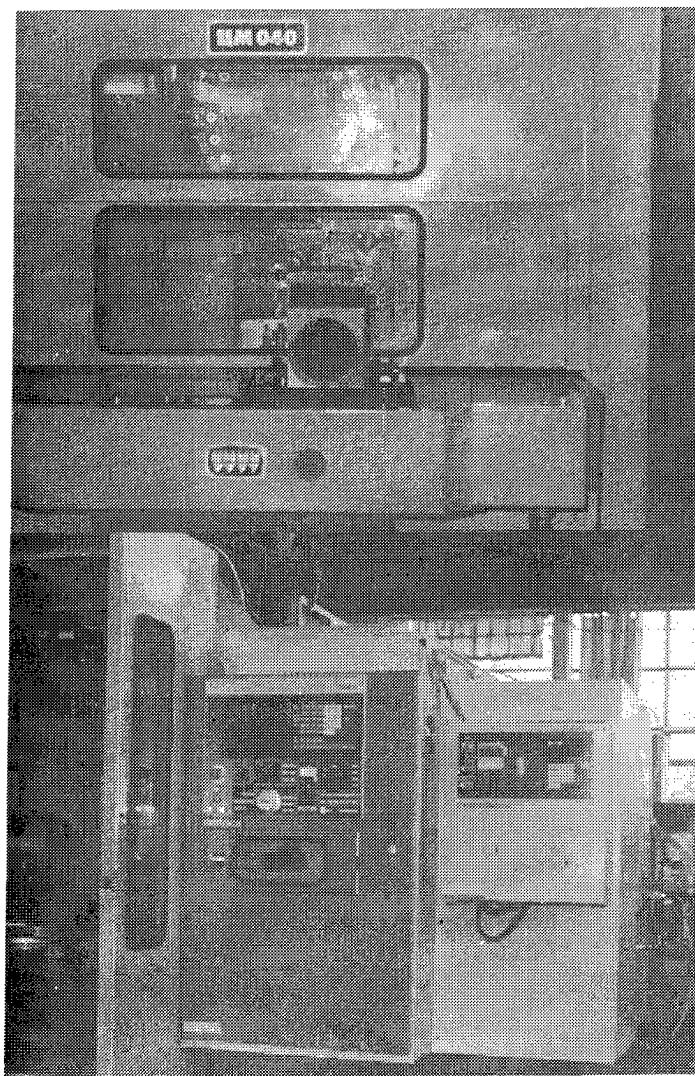
Sofia BULGARIAN FOREIGN TRADE in English No 4, p 21

[Text]

Designed for the high-grade machining of body parts not exceeding in size a cube with a 400-mm side, the CM 040 centre performs milling, drilling, threadcutting, reaming and countersinking operations. In particular, it is very efficient in milling complex outline surfaces at high precision. Fitted with a 20-tool box whose tools are automatically replaced within 3 1/2 seconds, it also has a pallet replacement of details, making it possible to remove the workpiece from the pallet and to

put there a new billet without stopping the machine.

All these operations are automated by means of the modern Fanuc 6M microprocessor system. Thanks to it, the productivity of CM 040 is from three to five times higher than that of all-purpose metalworking machines. All the operator has to do is to keep tab on the proper functioning of the machine, which in turn is a prerequisite for effective multimachine servicing.



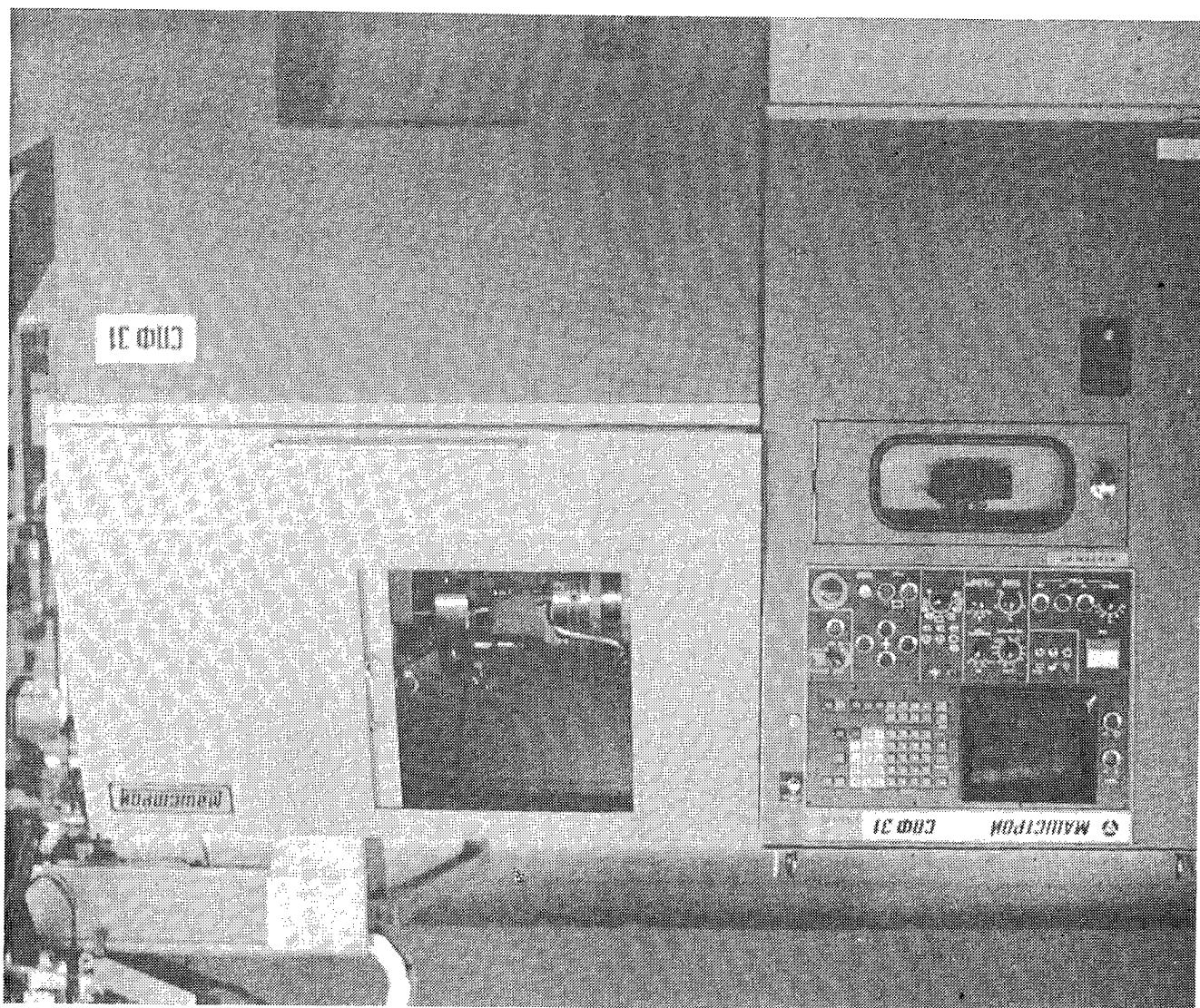
Machining Center SPF 31

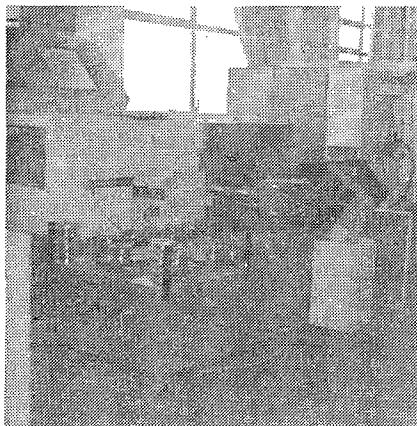
Sofia BULGARIAN FOREIGN TRADE in English No 4, 1983 p 25

[Text]

The turning, drilling and milling processing centre SPF 31 is designed for the machining of rotational chuck details up to 420 mm in diameter. High stability is obtained thanks to the mobile spindle head and the transversal carriage led directly onto the machine's body; this also implies high-precision machining regardless of the great speeds, up to 4,500 rpm. SPF 31

is fitted with two capstan heads: a basic one with 12 positions and an auxiliary one with 8 positions, while the spindle can be fixed in 72 positions. As a result, operations are highly concentrated, making for much shorter machining time, higher quality and lower metal consumption. A robot, an auto-operator of the AOP 01 type, attends to the placing of the billet and to the





removal of the finished part, so that the machine functions automatically. At the customer's request, the machine can also be supplied without a robot.

All the operations are performed under the control of the inbuilt Fanuc 6T microprocessor system. It is fitted with a videodisplay, which considerably alleviates the work of the operator in introducing the programmes, attuning and supervising the functioning of the machine.

**EXPORTER:**  
**MACHINOEXPORT**  
**Sofia 1000, Bulgaria**  
**5 Aksakov St.**  
**Telex: 23 425, 23 426**

#### SM-RSD-05 Machine System

Sofia BULGARIAN FOREIGN TRADE in English No 4, 1983 p 32

[Article by Eng V. Grigorov]

[Text]

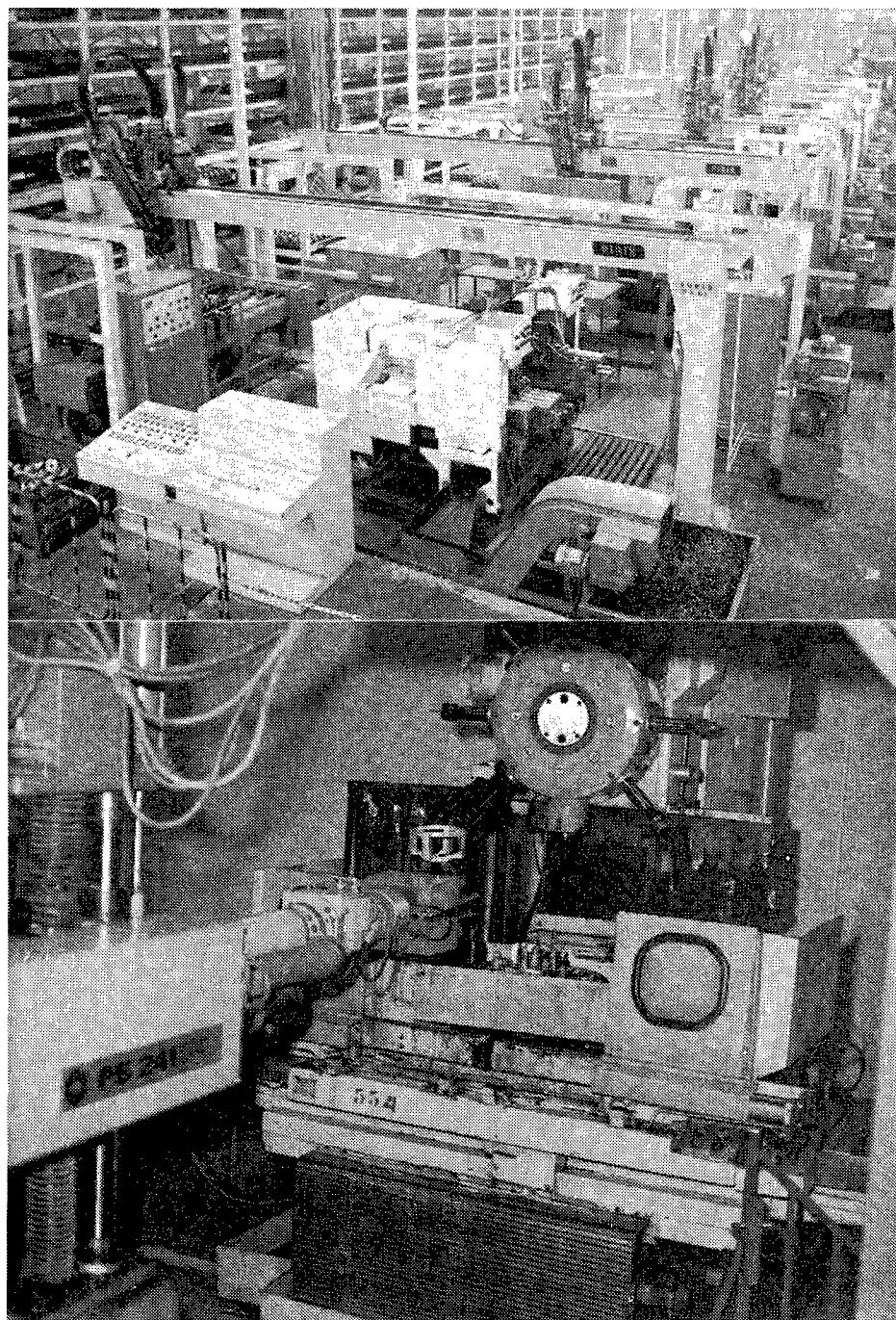
The manufacture of d.c. electric motors for electric trucks often calls for the machining of small, rapidly replaceable lots of parts in a wide size range. The machine system SM-RSD-05, which has been introduced into the Georgi Kostov plant in Sofia, meets these requirements.

Representing a new technical solution, it has maximal flexibility as regards type and size of the workpiece and guarantees high capacity as well as good quality.

SM-RSD-05 is designed for the overall mechanical treatment of eight types and sizes of details. The technological process includes two turning, one drilling-threadcutting, control and transport operations. All the equipment forming this system are Bulgarian-made. The turning operations are performed on automatic modules with SE 062.10 lathes, while the drilling and threadcutting operations are performed on automatic modules with RB 001.10.15 machines.

The details are kept in a permanent angle-oriented position, in special pallets. The latter are transported by a transmanipulator with ISOMATIC T microprocessor control and a miniterminal for long-distance control.

The pallets with the details arranged in them are placed into a rack which performs the functions of an intermediary storeroom for ensuring interoperational stocks, as well as for storing billets and finished details. At the order of the module the transmanipulator automatically takes the required pallet and places it on a rotating pallet station at the respective module. The pallet station is an automatically orienting unit with its own drive and is capable of operating as a component of an automatic technological module, flow line or machine system. The rotating pallet stations in SM-RSD-05 serve to orient the detail-carrying pallets in a precisely determined position, while fixing them stably in a longitudinal and transversal direction,



so that they can be serviced by robots and transmanipulators.

Every module is composed of:

a) A machine tool. For turning operations this is a SE 0.62.10 lathe for chuck

machining with inclined guides and a ZIT 500 T microprocessor system for numerical control, high-momentum feeding drives, automatic opening and closing the shield on the working zone,

chuck blowing and oriented stoppage of the spindle. For drilling and thread-cutting operations the machine is RB 001.10.15 with a ZIT 500 T microprocessor system with numerical control, a device for the basing and tightening of the workpiece and automatic fencing off of the work area. The machine has an 8-position capstan head and in addition is fitted with rapid-replaceable multispindle heads.

b) Robot RB 241 for feeding the respective machine tool with billets and for removing the finished details.

c) A Pallet rotary station.

d) Control devices for period manual checking of the finished details.

The organization of production established in the system ensures a maximal utilization of the machines, reducing preparatory conclusive as well as auxiliary times, while shortening the overall workpiece machining cycle and securing a high quality of the products. The SM-RSD-05 machine system is serviced by two operators per shift.

**EXPORTER:**  
**MACHINOEXPORT**  
**Sofia 1000, Bulgaria**  
**5 Aksakov St.**  
**Phone: 88-53-21**  
**Telex: 23 425**

#### Endoton 01B Gastroenterostimulator

Sofia BULGARIAN FOREIGN TRADE in English No 4, 1983 p 36

[Article by Eng G. Dimitrova]

[Text] Endoton 01B is an apparatus designed for the activation of the peristalsis of the gastrointestinal tract for medical and prophylactic purposes, as well as for the treatment of diseases of the bladder. It is applied to surgical patients with dynamic impassability, with paresis of the intestines as a result of a painful syndrome or after surgical intervention of the organs of the abdominal cavity. It produces a very good effect on patients with paresis or paralysis of the gastrointestinal tract after a fracture of the spine or trauma of the brain, patients with chronic constipation, as well as with hypokinesis of the gastrointestinal tract due to general hypodynamics. It has also proved successful in the treatment of incontinence of urine of post-traumatic and post-surgical origin, as well as with upset functions of the bladder following damages of the central or peripheral nervous system.

The apparatus is portable and can be used in special offices right next to the patient's bed, in his home or in the hospital.

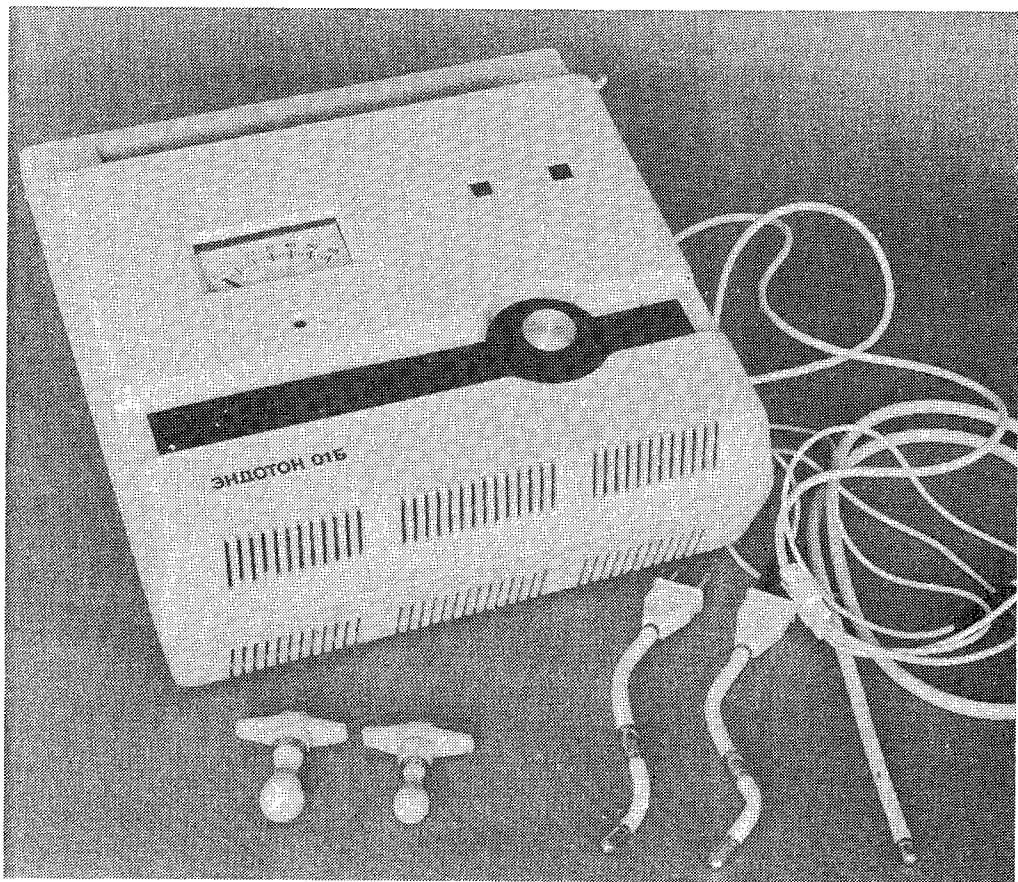
Endoton 01B represents a generator of continuous monopolar and serial bipolar pulses. It is applied in a periodic regime, the electric pulses alternating with pauses.

#### Specifications

Maximal amplitude of output current — 35 mA, with a charge of 1 k. Frequency of monopolar and serial bipolar pulses — 12.5, 25.0, 50.0 and 100.0 Hz. Frequency of bipolar pulses — 1000 Hz;

Period in periodic regime — 4 sec. (active: 2 sec; pause: 2 sec.); Supply voltage — 220 V; Weight — 2.5 kg.

The apparatus is fitted with electrodes for inner-cavity and external stimulation. These are of four types: gastral, 5; rectal, 5 (for adults and children each); anal, 3 (for adults and children each); flat, 3.



The gastral electrodes are designed for the stimulation of the upper parts of the gastrointestinal tract, the gastral electrode being introduced into the inner cavities (stomach, duodenum), and the flat electrode being placed above it on the outside. The gastral electrode makes it possible to extract gastric juice or to introduce nutritive or medicinal solutions.

The rectal and anal electrodes are designed for the stimulation of the lower parts of the gastrointestinal tract. Bipolar or monopolar stimulation of the rectum is possible by means of the rectal electrode. Bipolar stimulation is effected by inserting the negative outlet of the patient's cable into the one electrode pole and the positive outlet into the other. With monopolar stimulation the cable's negative outlet is inserted into both poles of the rectal electrode and the positive outlet into the flat electrode of the abdominal wall. Finally, the anal electrode serves to stimulate the anal sphincter.

Depending on the ailment, the doctor selects the electrodes, the regime and the parameters of the stimulation.

The gastroenterostimulator Endoton 01B is a joint development of Bulgarian and Soviet experts resp. at the Institute of Medical Technique in Sofia and the VNIIMPT Institute in Moscow. It has passed technical and clinical tests with flying colours in both countries. At present this apparatus is manufactured at the Drouzhba plant for medical apparatus in Vratsa. Most of the output is set aside for export.



**EXPORTER:**  
**ELECTROIMPEX**  
**Sofia, Bulgaria**  
**17 George Washington St.**  
**Phone: 8-61-51**  
**Telex: 22075, 22076**

### Economic Briefs

Sofia BULGARIAN FOREIGN TRADE in English No 4, 1983 p 18

[Text] Plovdiv Spring Fair of Consumer Goods and Foods. The third international spring fair of consumer goods, foodstuffs and tobacco was held in the city of Plovdiv from May 9 to 15. Its participants comprised over 1,300 foreign firms from 55 countries. The great interest in that event is due to a considerable extent to the specialization by branches. The foremost participants were companies displaying ready-to-wear for men, women, children and babies, leather garments and furs, textiles made of natural and synthetic fibres, shoes, handbags, luggage and fancy goods, in short all that pertains to what people wear in the widest sense of the term, as well as to interior textile.

Bulgaro-Romanian Cooperation in Agricultural Machinebuilding. Bulgaria and Romania are now cooperating in the manufacture of a small tractor for gardening, small farms and maize combines, of soybean harvesters and other agricultural equipment. At the second session of the Bulgaro-Romanian task force for tractor and agricultural machinebuilding, which was recently held in Bucharest, ways and means were explored of broadening cooperation and specialization in the manufacture of tractors, agricultural machines and equipment for stock-breeding farms.

New Balkan Airline. Balkan Airlines will soon service another airline: Sofia-Tripoli, Lagos-Harare. The flight will be once a week, on Saturday, and will take 15 hrs and 45 min with stops in Lagos and Tripoli. The new airline is expected to promote political, economic and cultural relations between Bulgaria and Zimbabwe. Balkan airliners are now flying to 44 cities in Europe, Asia and Africa.

New Vessel for Polish Merchant Marine. At the beginning of 1983 the Georgi Dimitrov shipyard in Varna delivered to Poland the 38,000-ton freighter for loose goods 'General Dombrowski', which will be a valuable addition to that country's merchant marine. This ship was designed by a team at the Institute of Shipbuilding in Varna. It is highly automated and secures 48 hrs watchless conditions of servicing in the engine compartment and a system for the automatic control of the mechanisms.

New Products of the Pharmaceutical Plant in Stanke Dimitrov. Another valuable substance has been added to the production and export list of the pharmaceutical plant in the town of Stanke Dimitrov: AZ addends for slightly acid, brilliant galvanization. Various slightly acid sulfate, sulfate-chloride and chloride electrolytes for brilliant galvanization, with or without ammonium ions, are prepared from them. The electrolytes permit to deposit high-grade brilliant zinc coatings in a wide range of current densities in stationary tubs, drums and bells. They possess a highly diffusive capacity and a cathode utilization of the current exceeding 95 per cent. The coatings obtained from them are plastic, with a good cohesion with the base and conform to requirements for anticorrosiveness. Easily maintained and non-toxic, the electrolytes remain stable after long use and save metals and energy.

Transkomplekt Builds in Four Continents. Transkomplekt is one of Bulgaria's youngest engineering enterprises. Its 1983 programme provides for the construction of a highway ringing the town of Tikrit in Iraq, where it is also building a big highway overpass in the town of Baiji. In Kuwait its specialists are urbanizing one of the capital's districts. In Nigeria the construction of a ring-highway for the town of Maigaduri is to be started soon. Bulgarian designers and builders have been entrusted with the development of two districts of the country's new capital Abudja. Seven projects are now under construction in Cuba, a country with which cooperation is steadily growing and broadening. Transport projects in Nicaragua, too, are now being designed. Transkomplekt's activities in Greece, Lebanon and several other countries are to be extended in the near future.

### New Inventions

Sofia BULGARIAN FOREIGN TRADE in English No 5, 1983 p 15

[Article by Eng I. Dimitrov

[Text]

This invention permits direct introduction without the long established practice of experiment investigations of suspended lattice irrigators with a changing geometry vs the selected prototypes. It is an irrigator for cooling towers, consisting of polymer lattices combined in an optimal number of storeys. Its cooling effect is about 60 per cent higher than that of wooden irrigators and roughly 40 p.c. higher than that of streamlined eternite and sheet-polymer irrigators. In weight it is only 20 p.c. of the wooden irrigators it replaces and from 2 to 5 p.c. of the streamlined eternite and sheet-polymer irrigators.

Yet another asset of the new development is its low labour consumption when replacing an irrigator: barely 5 per cent of that for the replacement of wooden and streamlined eternite or sheet-polymer irrigators, other conditions being equal.

The guaranteed lifetime of the new irrigator is about 25 years, as against 8-10 years for its wooden version, and 5-6 years for streamlined eternite irrigators, when fresh natural water is used with

a mean carbonate hardness requiring stabilization by means of acidification. As a result of improved and deeper cooling, 1,000 m<sup>2</sup> of cooling built-up area guarantees an annual power saving of about 2 million kWh.

The invention permits to mount the irrigator in cooling towers and apparatus regardless of size and shape.

The new type of lattice storey polymer irrigator finds employment in cooling towers, technological columns and apparatus of arbitrary size and shape, regardless of whether they are brand-new or subject to repair.

The high effectiveness, low labour consumption during mounting and unlimited opportunities of use with different types of cooling towers and similar equipment have been borne out in practice.

Technika, a foreign trade organization, offers the designing and execution of the new type of irrigator with supply of the elements necessary for the purpose, both for new equipment and for equipment subject to repair.

## **PHOTOMATERIALS FOR TECHNICAL PURPOSES**

**G. VASSILEV**

New types of photographic materials according to a technology new in principle — dry method by in-vacuo evaporation of substances sensitive to light — have been developed in Bulgaria.

The technology finds application in the production of a series of photomaterial for technical purposes: photolithography, microphotography, photodocumentation, polygraphy, as well as recording of ions and electrons. Some of these are used in microelectronics and electrical engineering, their properties restricting electronization to a considerable extent. Tests of Bulgarian plates made in the Karl Zeiss factories in Jena, GDR, have shown that in resolution they surpass all those known in world practice so far with a thousand times greater sensitivity. On the basis of silverless light-sensitive substances, a technology has been developed and a pilot line has been built for the production of photomaterial for flexible printed circuits and flat wiring.

### **DRY INORGANIC PHOTORESIST**

A new technology has been developed in Bulgaria for the obtainment and treatment of dry inorganic photoresist. It is used in the production of chromic photo patterns, scales and screen lattices. Made by lengthening the vacuum cycle for chrome evaporation from 20 to 40 minutes, when applying a

photoresist layer of chalcogenic glass, it obviates the need of centrifuge and equipment for applying a liquid photoresist. Thanks to the new technology, coatings quite uniform in thickness can be obtained with standard photographic properties on a large number of substrates of arbitrary shape. With a dry inorganic photoresist the photosensitive layer has to be less thick, so that greater accuracy of reproduction is achieved.

In alkaline solvents the dry inorganic photoresist has the property of photoselective solubility. With acid solutions, especially with chrome solvents, it has a good protective capacity. It can be used as a substitute of liquid photoresists whenever it is employed as a protective agent of chrome layers. It has practically unlimited resolution as well as good retention of the photographic properties before and after exposure. It permits to transmit big and small structures with the same exposure and development, something unattainable with liquid photoresists. Two to three times pre-exposure and predevelopment are possible. The technology used in the production of chromic photo patterns, scales and screen lattices is an invention protected by an author's certificate. It finds employment in machinebuilding and electronics.

#### **Address:**

**TECHNIKA**  
**Foreign Trade Organization**  
**Sofia, Bulgaria**  
**125 Lenin Boul., Bl. 2**  
**Phone: 70-20-41**  
**Telex: 232 78**

## USSR Power Generation Cooperation

Sofia BULGARIAN FOREIGN TRADE in Eng No 5, 1983 pp 19-21

[Article by B. Brankov]

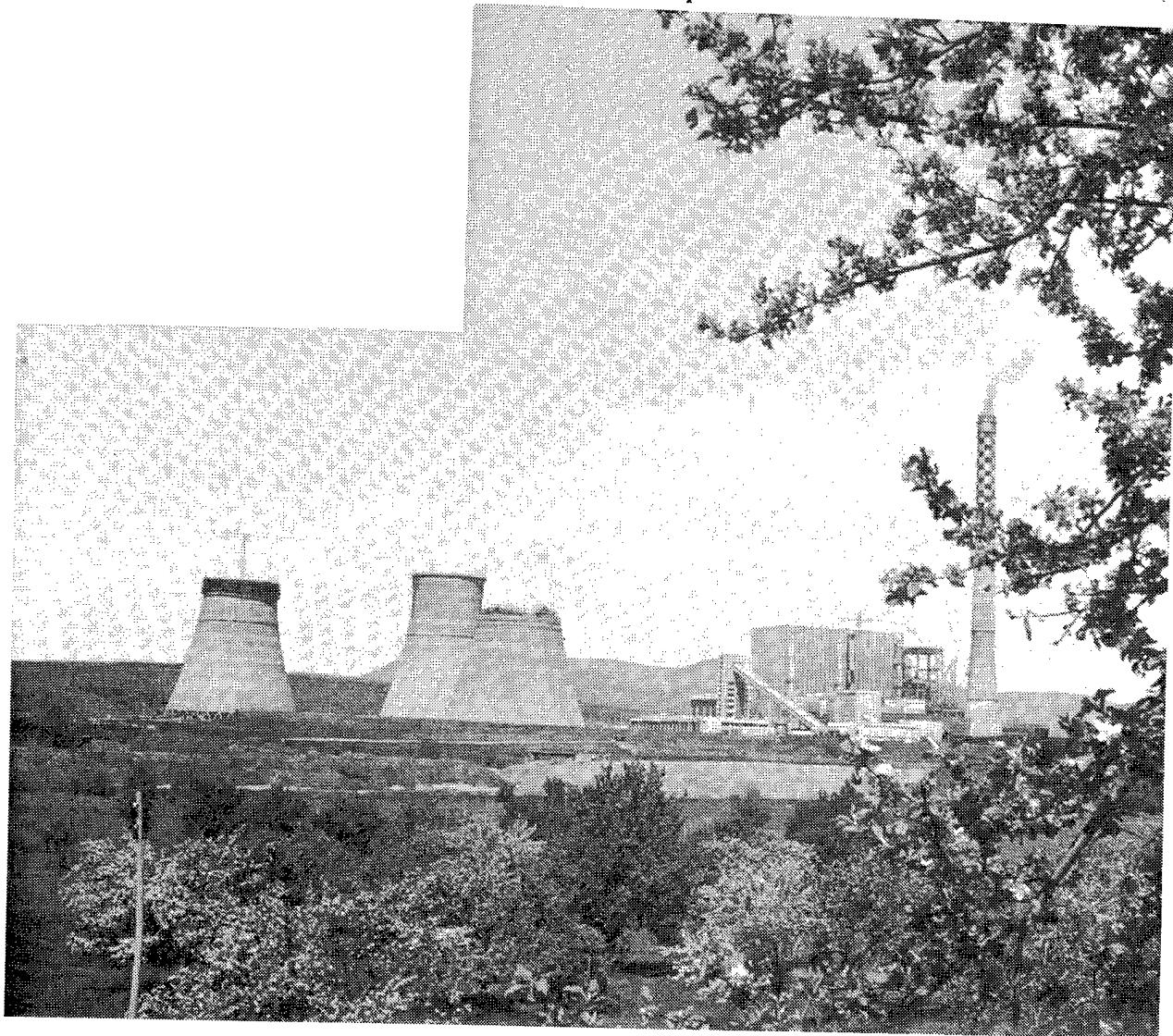
[Text]

It may come to many as a surprise but, as regards energy, Bulgaria figures among the most advanced countries in Europe. Its remarkable achievements in this field so far are primarily a fruit of Bulgaro-Soviet friendship; this is true, in particular, of the big steam power plants First Komsomolian, Maritsa-East 2, Maritsa-East 3, Varna and, of

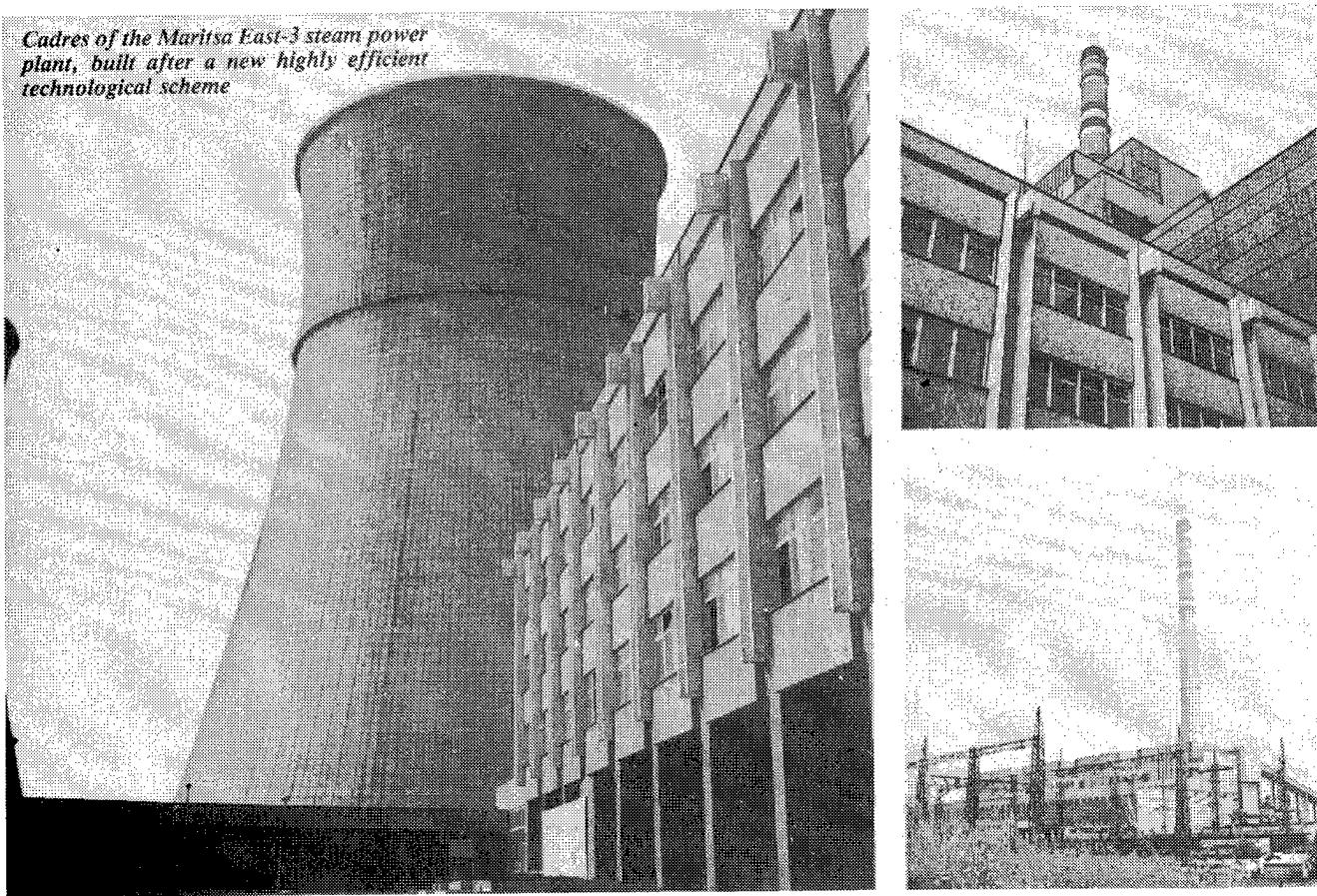
course, the Kozlodou atomic power plant.

Cooperation with Soviet experts in this sphere and the use of Soviet equipment have made it possible to extend the Varna plant by adding three 210-megawatt blocks, Maritsa-East 3 by four 210-mw

*General view of the Bobov Dol steam power plant*



*Cadres of the Maritsa East-3 steam power plant, built after a new highly efficient technological scheme*



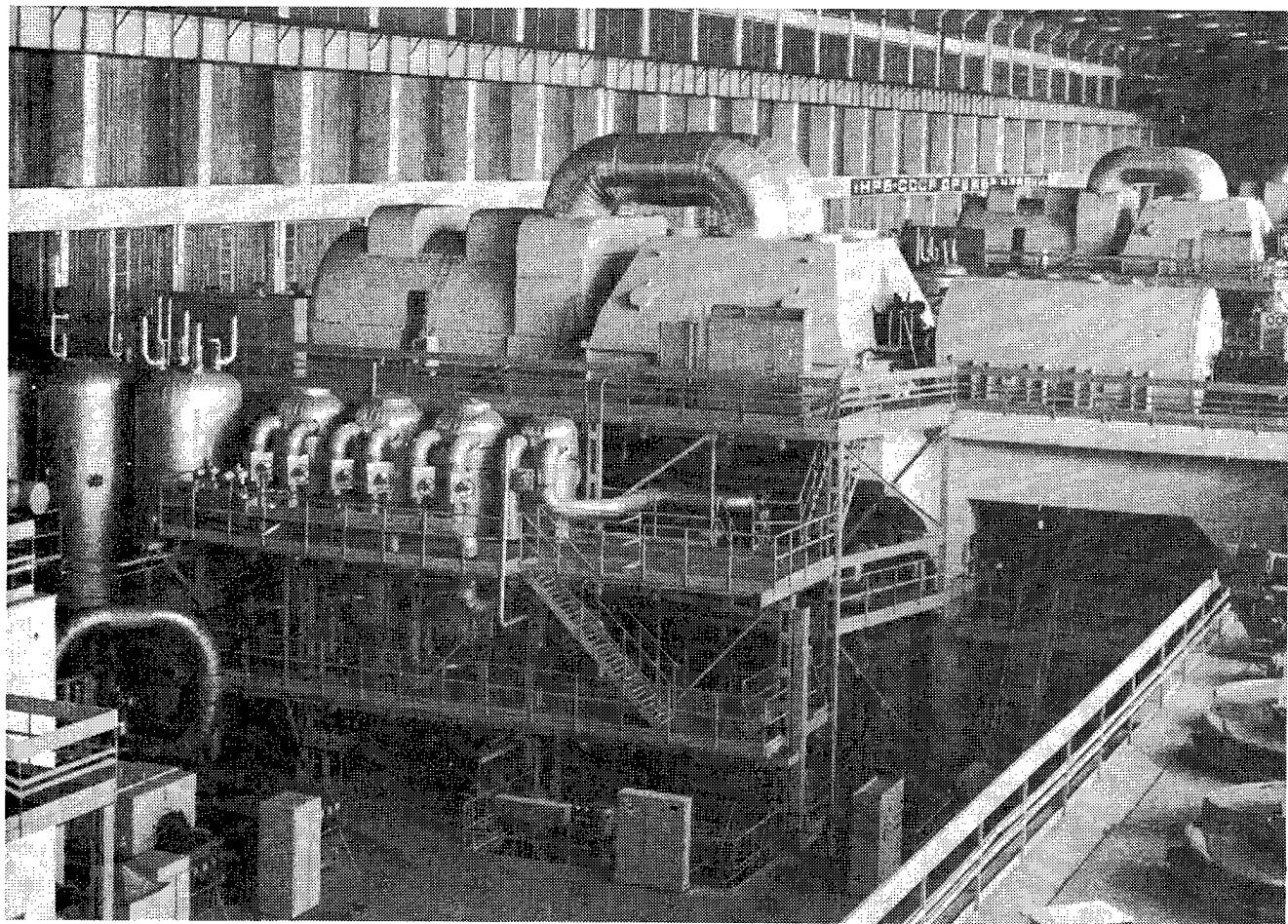
blocks, and Kozlodouï-2nd stage by two 440-mw reactors.

Bulgaria ranks among the leading countries in the world in the burning of low-calorie lignite coal in powerful energy blocks for the generation of electricity. The Maritsa-East 3 plant has been built according to a new, highly effective technological scheme devised by Bulgarian experts and equipped with Soviet machinery.

The considerable experience gained, scientific and technological as well as industrial, has enabled Bulgarian and Soviet specialists to design a standardized boiler set generating 220 tons of steam per hour for the burning of low-calorie lignite coal. This set will be made on a cooperative basis and will be used for industrial and central heating purposes.

Low-calorie coal from different lignite deposits in Bulgaria will be burned. The new boiler set is to be used also in the Soviet Union, and it is planned to subsequently export it to other countries as well.

Bulgaria has also made good progress in developing atomic energy, thanks chiefly to Soviet technical assistance. In 1974 the first 440-megawatt reactor of the Kozlodouï atomic plant was put into operation, catapulting Bulgaria into the select group of pioneers in the development of atomic energy for peaceful purposes. Today no less than four reactors are functioning at Kozlodouï, whose total energy has attained 1,760 megawatts. In 1982 over 25 per cent of the electric energy produced in Bulgaria came from atomic blocks.



The nation's energy system now consists of big electric power plants and powerful distribution networks and substations with voltages of 400, 220 and 110 kV.

Along with the development of energy, thanks to collaboration with Soviet experts, thousands of Bulgarian specialists have become capable of tackling the most involved problems connected with the designing, building and operation of energy development projects.

At present Bulgarian experts are building many energy projects abroad, especially in hydroenergy, which are based on Bulgarian designs.

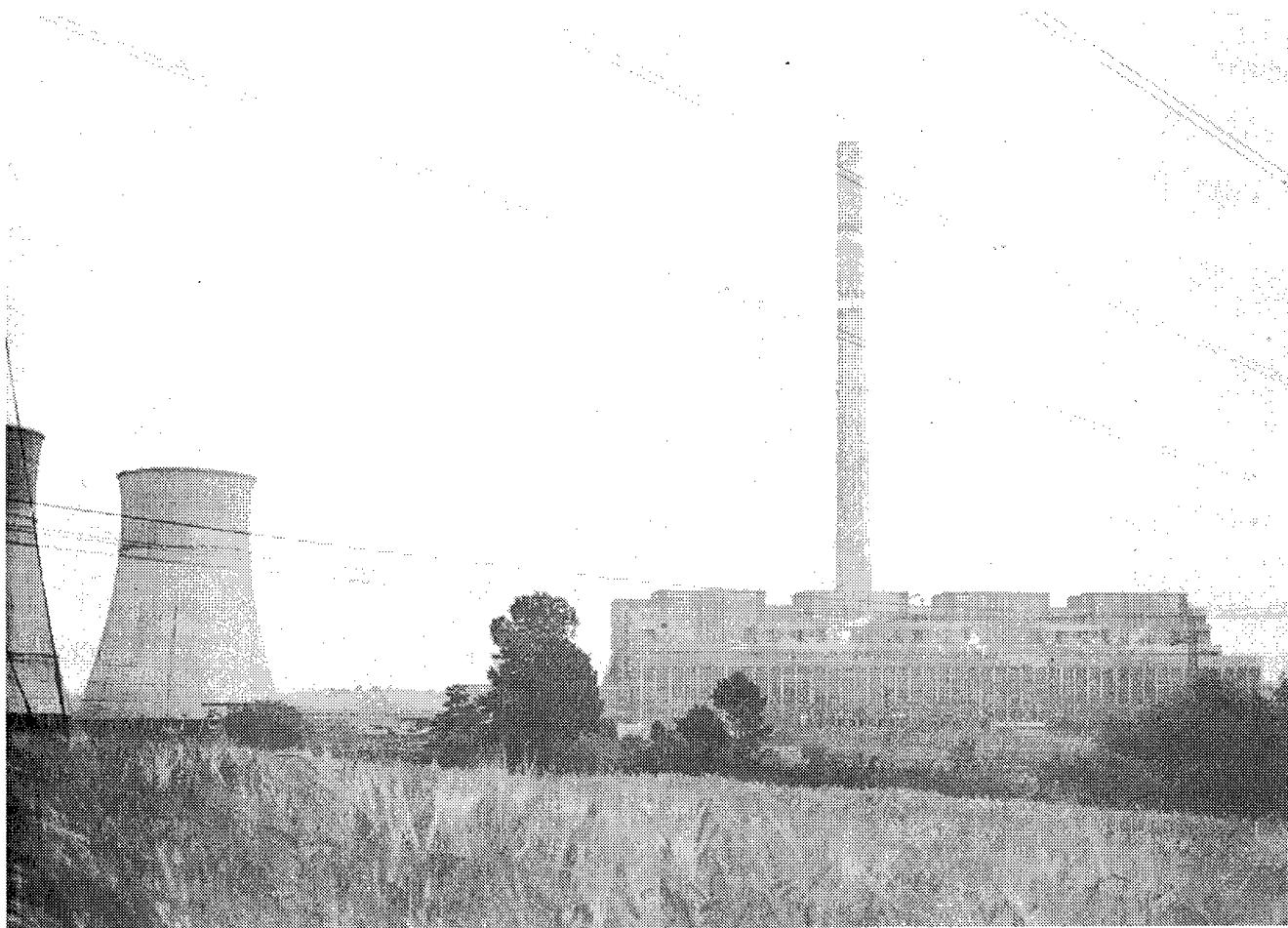
The Bulgarian Ministry of Energy and the Soviet Ministry of Energy and Elec-

trification have coordinated a comprehensive plan for economic, scientific and technological collaboration and cooperation up to 1990. In the next 15 to 20 years our nation's power-generating capacities are to be expanded by making use of local low-calorie coal, chiefly in the Maritsa-East basin, and by further developing atomic energy, installing 1,000-megawatt blocks.

Planned targets set for 1981-85 and up to 1990, to be realized in close collaboration with the Soviet Union, comprise: an extension of Kozlodouï by adding two 1,000-mw reactors, construction of Kozlodouï-2 with several 1,000-mw reactors, extension of Maritsa-East 2 by adding two 210-mw

blocks, a 750-kV transmission line for connecting the grids of Bulgaria, USSR and Romania, further development of central heating by using standardized boiler sets for the combustion of low-calorie coal.

The designing, construction and operation of atomic power capacities will be effected as heretofore in close collaboration with Soviet experts. Bulgaria will play an active role in the cooperated production by the CMEA countries of equipment for atomic power plants, so as to meet the growing needs of all the countries belonging to the socialist community.



Telekomplekt Engineering Economic Organization

Sofia BULGARIAN FOREIGN TRADE in English No 5, 1983 pp.23, 24

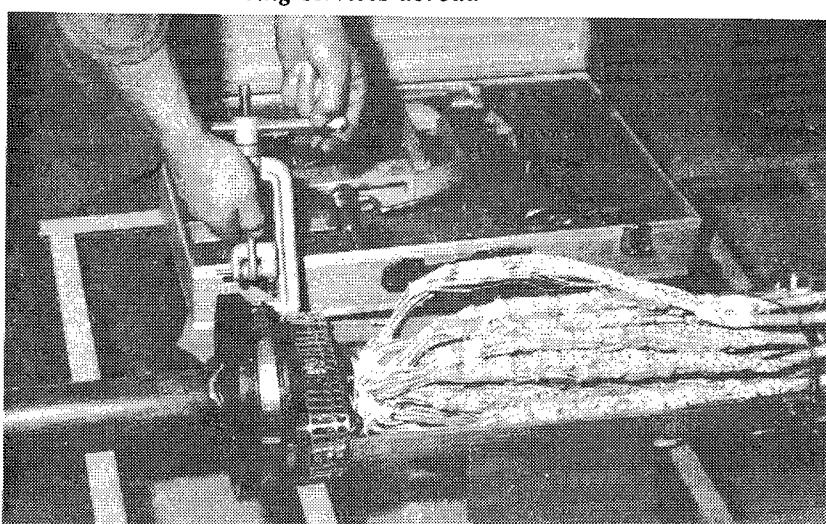
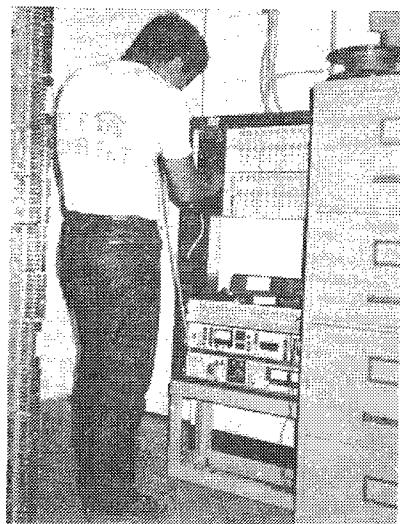
[Text]

Telekomplekt engages in activities in the sphere of telecommunication capital investments and construction at home and abroad. It comprises eight enterprises, including the Isproekt Research and Designing Institute, an enterprise for material and technical supplies, and four regional enterprises for

the construction of telephone networks.

Telekomplekt offers a wide range of services, among which: feasibility study, investigation and designing of new telecommunica-

*Telekomplekt's activities comprise the laying of telephone cables, the testing of systems, assemblage and various engineering services abroad*



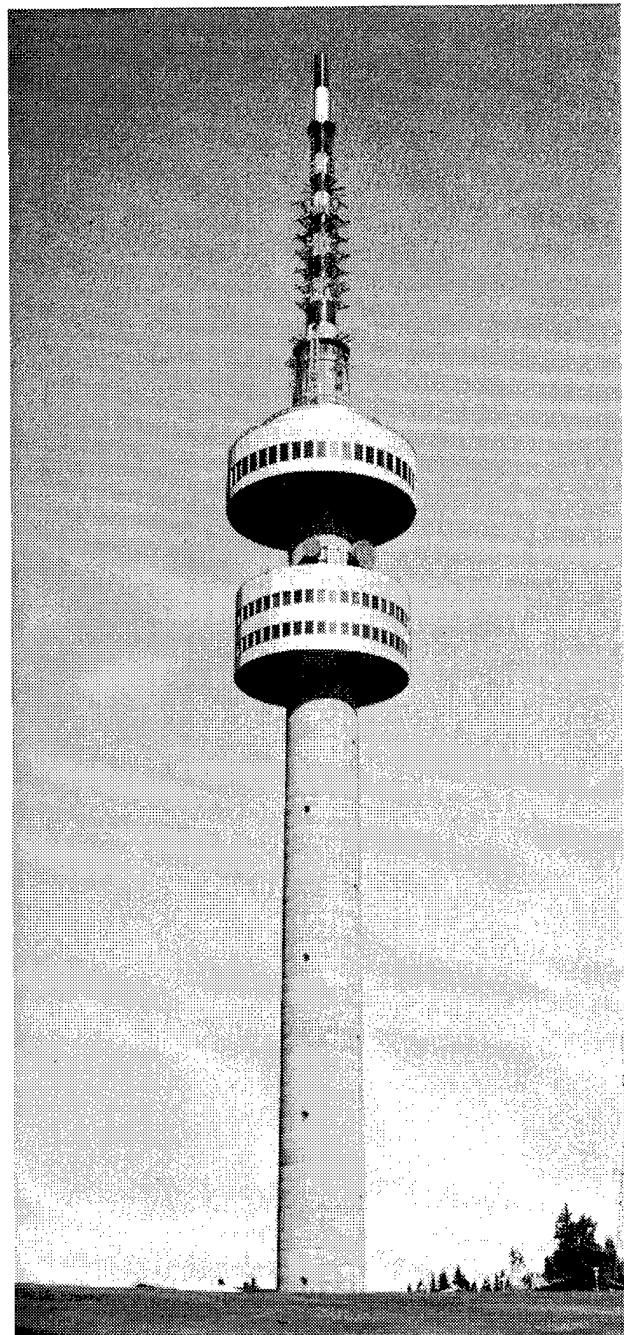
tion systems and designs for the overhauling and updating of existing ones. It supplies equipment, builds, assembles and puts into operation such systems or parts thereof with a guaranty in the field of automatic telephone and telegraph exchanges, long-distance lines and local cable networks, cable analog and digital transmission systems, radio-relay systems, TV and USW frequency modulated transmission systems, USW and SW transmission and reception as well as MW broadcasting stations.

Telekomplekt also supplies technological, telemechanical and transmission telesystems for gas and oil pipelines, radio towers and masts, and PTT buildings.

Telekomplekt's record comprises radio-TV towers varying in height as well as radio-relay stations on the London-Sofia-Calcutta line.

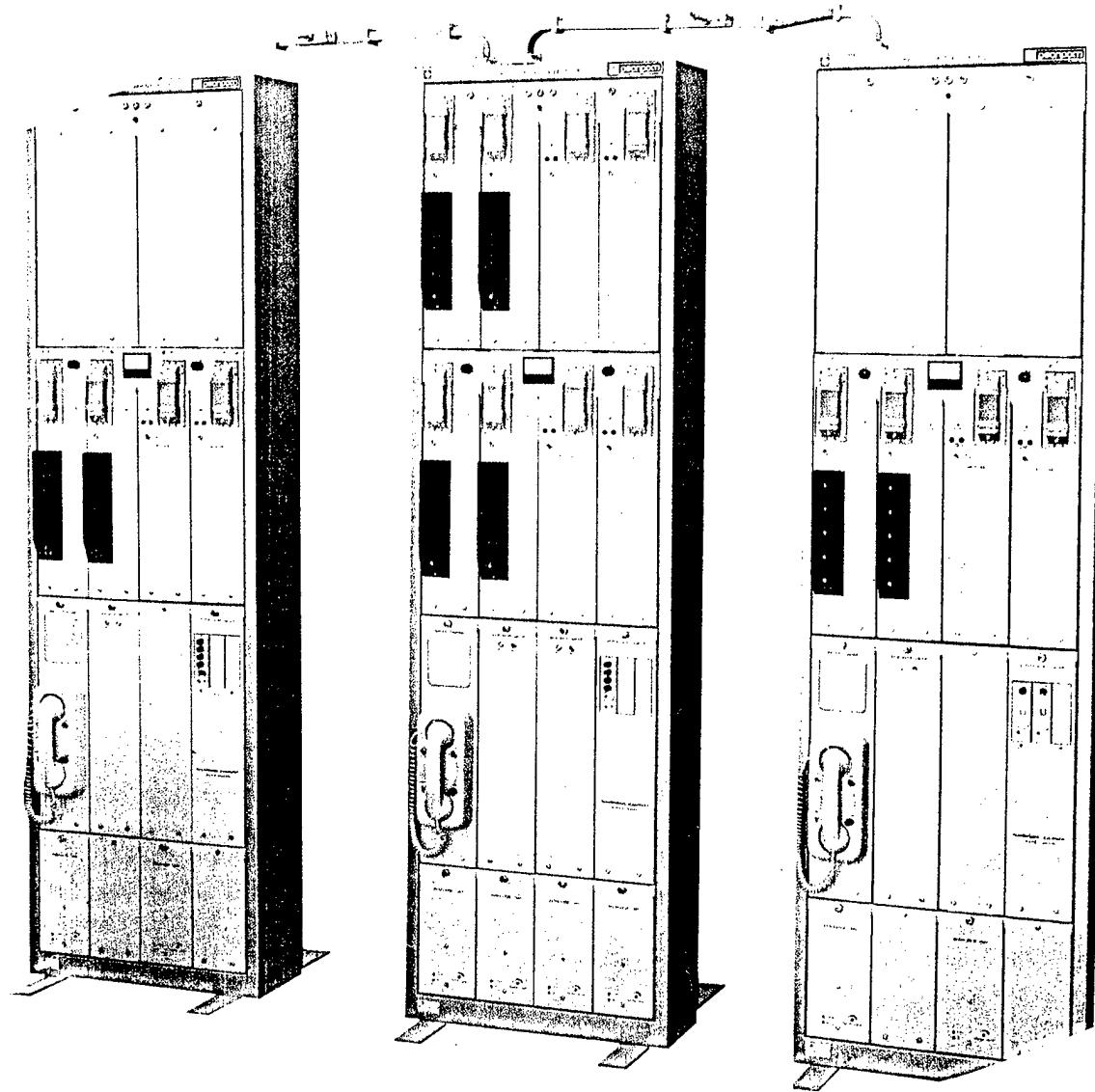
The latter is a standard building varying in height from 18 to 120 m with inbuilt feeding devices and telecommunication equipment; it consists of several units which are mechanically assembled with static and mobile cranes.

The equipment supplied and built by Telekomplekt is technologically up-to-date, guaranteeing effective telecommunications.



**Address:**

**TELECOMPLEKT**  
**Sofia 1606, Bulgaria**  
**8 Totleben Boul.**  
**Phone: 51-70-17**  
**Telex: 22 706**



#### Telecom

**Carries Out:** study, designing, delivery, mounting and assembly supervision, commissioning and servicing of complete communication projects and systems

**Lends:** technical assistance and consultations, trains specialists for communication projects and systems

**Exports:** know-how, complete plant and systems for communication technology, radio-relay lines 2, 6, 8 and 13 GHz  
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12 + 12 symmetric cable systems  
60/120-channel systems by symmetric high-frequency cable with styroflex insulation  
300-, 960- and 2700-channel systems by coaxial

small-sized cable 1.2/4.4

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control systems for agroindustrial complexes  
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Export List: radio technology for the home (radioelectronics, Tvs--black-and-white and colour; radio sets, amplifiers, etc.)--loudspeakers--normal and hi-fi class--acoustic columns, mikes, megaphones--telephone sets and parts--capsules, dials--TV aerials--pipe-bending machines with high-frequency heating flow lines for ultrasonic treatment and high-frequency heating.

Address: TELCOM Sofia 1040, Bulgaria, 17 George Washington St., Phone: 8-61-81,  
Telex: 220 77, P.O. Box 933

#### Maritsa, Hebros Typewriters

Sofia BULGARIAN FOREIGN TRADE in English No 5, 1983 pp 27-28

[Article by Eng N. Anghelova]

[Text]

Bulgarian-made Maritsa 11/23 portable typewriters belong to the mechanical class. Compact in size, they guarantee easy work and maintenance. They come with a 2.3-mm Elit and 2.6-mm Pica step size of the keyboard-operated type, so as to meet various tastes as regards size and looks of the types.

Maritsa 30 is a lightweight typewriter (3.8 kg) with improved indicators which is easily serviced and maintained. It has been well received in quite a few countries, including Great Britain, USA, Australia, France, Sweden, Belgium, Holland, GDR and FRG and, of course, the USSR and other socialist states in Europe.

On the basis of Maritsa, a new range of portable typewriters has been developed, reflecting the most up-to-date designing achievements in this sphere: the models Hebros 1300, Hebros 1300 F and Hebros 1300 T.

Last year Bulgaria's first electric typewriter appeared on the market. Hebros 300 is a portable machine weighing 6.5 kg with a 240-mm long

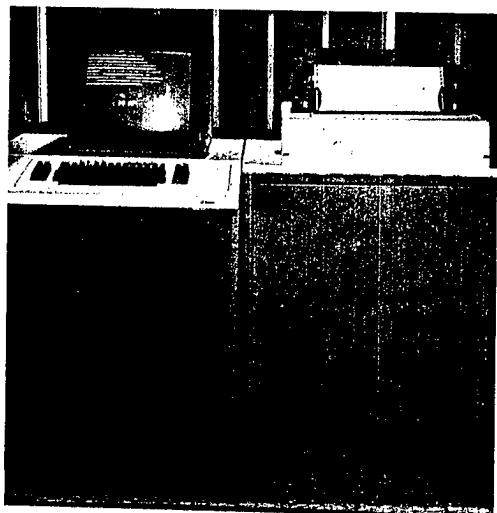
platenroller, 220V/50H and 115V/60H parameters, and a plastic facing. A desk modification thereof with a 305-mm long platen roller was recently put into production which weighs considerably less than the traditional machines of this type.

#### ISOT PRINTERS

Isot 132 D, Isot 230 and Isot 232 are devices for recording letter-numerical information on paper at a speed of 1,800 characters per minute. They are based on the consecutive printing principle with one carrier for the characters in the shape of a replaceable disk (daisy) with 96 positions. The systems are designed for: (1) independent work as a peripheral input-output device; (2) systems for data transmission and reception; (3) serving as accessories of systems for a character-digital display; and (4) microcomputer systems.

These devices are exported either by themselves or as part of the computers.

Exporter:  
**ISOTIMPEX**  
Sofia, Bulgaria  
51 Chapaev St.  
Phone: 74-61-51  
Telex: 22 731, 22 732



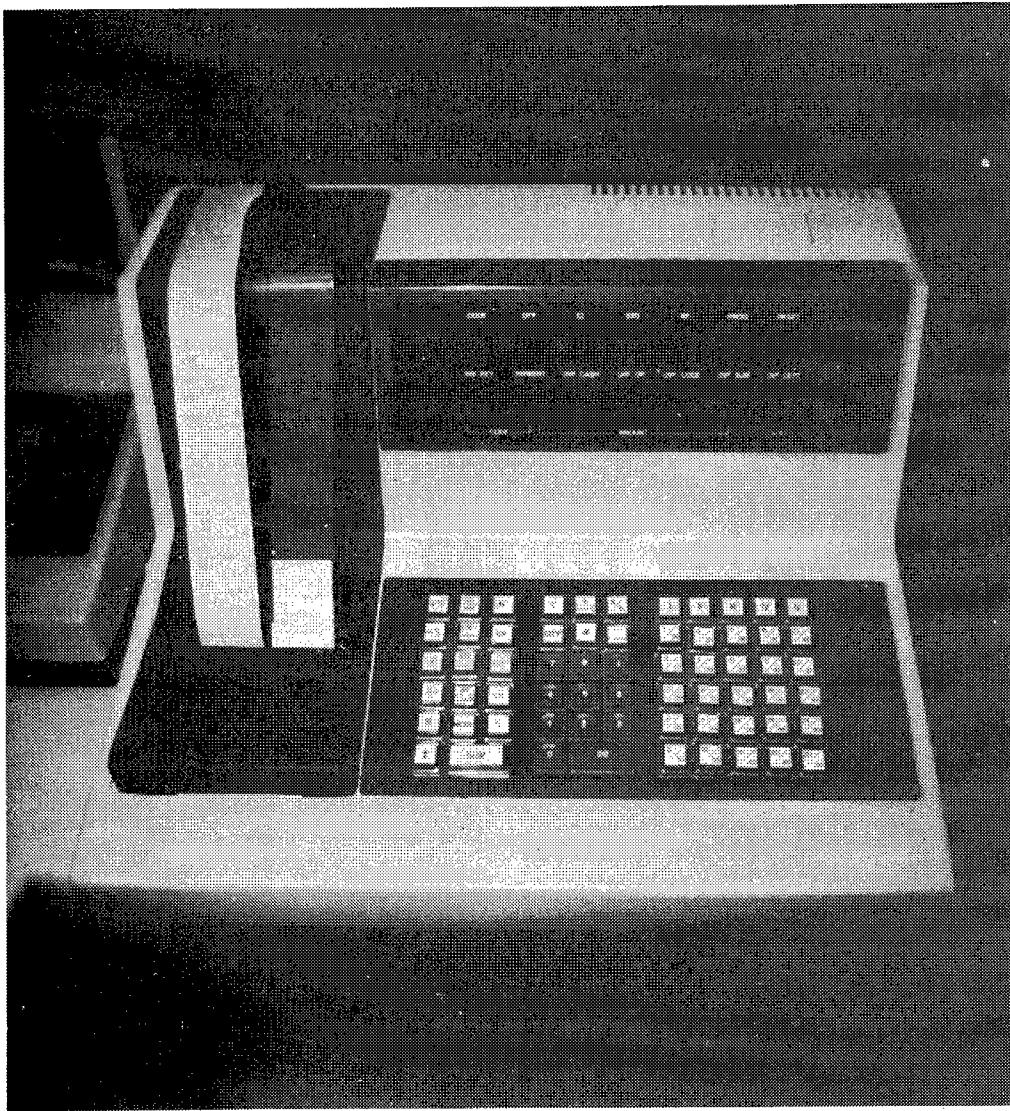
## Elka 81, 98 Cash-Registers

Sofia BULGARIAN FOREIGN TRADE in English No 5, 1983 p. 29

[Article by V. Davchev]

[Text]

The Elka 81 model, in which a new microprocessor of the series 600 is used, is based on the Elka 80 model developed in 1982 on a Bulgarian microprocessor of the series 500. It combines the most indispensable functional possibilities of meeting the customer's requirements for first-rate technological and functional facilities and ergonomic indicators. The convenient and



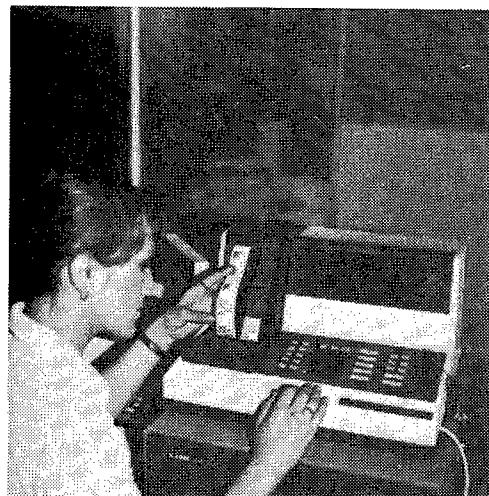
easily accessible keyboard, the noiseless printing and the two displays (one for the operator and the other for the customer) make for rapid, pleasant and flawless operation.

Elka 81 supplies the necessary minimum of information on how to operate small and medium-sized shops — three/four registers for three/four groups of goods or separate stands selected by the consumer, one cancelling register, two registers for officially incoming and outgoing entered sums, information on the number of sales and of buyers, an automatic calculation of the value or absolute allowance or discount, and calculation of a tax. The information is retained for 700 hours in the in-built storage battery. Moreover, the automatic blockings ensure proper functioning of the apparatus and forestall possible damages in feeding.

Recently a growing demand for specialized cash-registers performing a variety of functions and with a wider memory volume has been noticeable. Working along these lines, Bulgarian engineers and designers have developed several models of electronic cash-registers. The Elka 98 model is already finding application as an autonomous register as well as a register-terminal.

Elka 98 secures automatic value and quantitative control and accounting of 320 products divided into four commodity groups and registers the bills of 460 customers. Six waiters or groups of waiters using and individual coding key can operate with one apparatus. The turnover of each waiter or group is registered automatically. Four registers are provided for accumulation, depending on the mode of payment: in cash, on credit, with a cheque or coupon. The possibility of figuring out percentages greatly facilitates the calculation of allowances or discounts on the bills of customers.

Data and number of the cash-register, percentage discount or surcharge, the prices of the products can readily be introduced in Elka 98.



**Exporter:**

**ISOTIMPEX**  
**Sofia, Bulgaria**  
**5, Chapaev St.**  
**Phone: 74-61-51**  
**Telex: 22 731, 22 732**

## Cooperation With Greece

Sofia BULGARIAN FOREIGN TRADE in English No 5, 1983 p 33

[Article by Marin Todorov, research associate]

[Text]

Economic relations between Bulgaria and Greece picked up considerable momentum in the '70s, when trade increased more than ten times and various forms of industrial, technological and commercial cooperation made rapid progress.

The No.1 item in Bulgarian exports to Greece are machinery and equipment: lathes, milling machines, drills, electric and I.C.E. trucks, storage batteries, electric hoists, telephone sets and exchanges, and typewriters. Goods undergoing less treatment likewise figure prominently, in particular kaolin, pig iron, sheet iron and pipes, soda ash and caustic soda, toluene, sodium silicate, urea, polyethylene, ammonium sulfate and ammonium saltpeter. The group of foodstuffs and consumer goods comprises primarily brined cheese, fresh and frozen meat, live animals, perserved fruits and vegetables, cotton fabrics, drugs, glass and china sets.

The commodity structure of Greek exports to Bulgaria has likewise undergone dynamic changes. Along with traditional farm produce, the quantity of exported raw materials, semifinished goods and industrial products with a higher degree of treatment is increasing from year to year. Since 1980 cables and conductors, steel ropes, polystyrene, refractory material, hides, caviar, fresh and tinned fish, citric fruit and some drugs have been added to the Greek export list.

The two countries are paying particular attention to the expansion of trade and the recourse to new and more appropriate forms of economic collaboration. These problems figure high on the agenda of the joint Bulgaro-Greek Commission for Economic, Scientific and Technical Cooperation, which in October 1982 held its tenth annual session in Sofia. The sub-commissions attached to it, based on a branch and functional principle, con-

siderably alleviate the joint quest of additional opportunities for an extension and enrichment of the forms of cooperation. Various agreements, especially the Coordinated Trends for a Further Development of Bulgaro-Greek Economic Relations up to 1985, signed in April 1979, occupy an important place in the efforts made to stimulate up-to-date and promising initiatives in the field of engineering, industrial cooperation and collaboration in research and technology. Their further topicalization, deepening and enrichment represent a long-term programme for economic collaboration, which concretely and at length spells out the spheres and projects, the object of joint future ventures.

In the sphere of industrial cooperation, the joint manufacture of lathes, electric and I.C.E. trucks, buses and other industrial products is making good headway. Something quite new in this respect is the establishment of specialized task forces which, together with the branch subgroups, discuss ways and means of how to extend industrial cooperation. Since the beginning of this year such groups have been functioning in the field of machinebuilding, mining, agriculture, light industry and transport. The activities of the five joint companies set up on Greek soil are likewise picking up momentum.

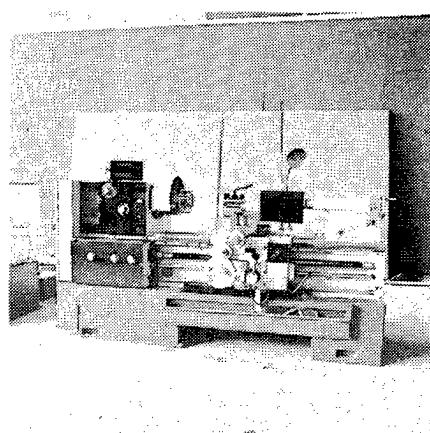
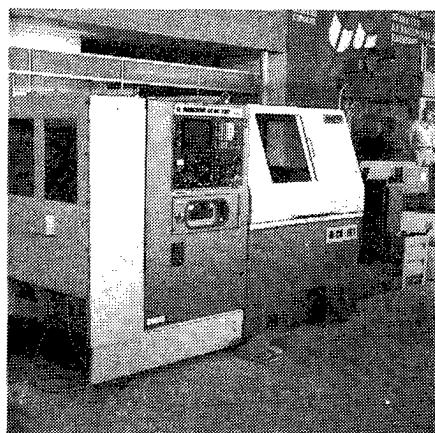
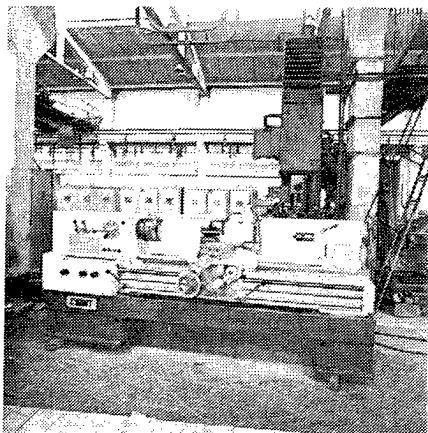
The linkage of the grids of the two neighbouring countries in April 1982 marks a new big step in the process of ameliorating collaboration in energy.

In the past few years Bulgaro-Greek links in transport, tourist trade and joint exploitation of the waters of rivers flowing through the territories of the two countries have been substantially deepened. Territorial proximity and the existence of various problems of mutual interest are an important precondition for the intensifica-

tion of collaboration in these specific fields.

The present-day development of economic links between Bulgaria and Greece illustrates the great opportunities that exist for unfolding economic collaboration between two neighbouring countries with different social systems, on the basis of mutual trust and the principles of peaceful coexistence.

*Machine tools marketed in Greece by Machinoexport, a Bulgarian foreign trade organization*



**Economic News in Brief**

Sofia BULGARIAN FOREIGN TRADE in English No 5, 1983 p 48

**[Text] New Plant of Bulgaro-Soviet Friendship**

A brick plant, the biggest in the Asian part of the USSR, is now being built in the city of Bratsk on the Angara River with the assistance of Bulgarian experts, staff members of Technoexport, an engineering economic organization. All technological operations in the production of bricks are to be mechanized and automated. So far Technoexport has supplied the Soviet Union with seven such plants.

### Bulgaria-Cuba: Socialist Integration in Action

The Bulgaro-Cuban Commission for Economic, Scientific and Technical Cooperation recently held its 16th session in Havana, Cuba. After making an in-depth analysis of economic collaboration, the session took the decision to broaden it. Prospects are most promising in this respect in the field of machinebuilding, electronics and electrical engineering, as well as agriculture. The construction of complete plant in Cuba with Bulgarian assistance is making good headway. Cooperated production and integration between the two countries open up good prospects for engaging in joint ventures on third markets. The session proceeded entirely in the spirit of the programme for the further development of Bulgaro-Cuban economic, scientific and technical cooperation and socialist integration in the post-1980 period.

### Bulgaro-Polish Cooperation in Chemistry

A program spelling out the main trends of development of bilateral Bulgaro-Polish relations in the chemical industry in the '80s has been signed. Poland is to supply complete plant, machinery and equipment, as well as technical services necessary for the further development of Bulgaria's chemical industry. Specialization and cooperation in the pharmaceutical industry, production of herbicides in agriculture, of dyes and pertinent semi-manufactured goods are to enjoy priority development. The spheres of scientific and technical cooperation to be directed toward a more efficient utilization of energy, raw and prime materials, as well as exchange of licenses, have also been determined.

### Mutually Beneficial Collaboration

Ways and means of further promoting technical and economic collaboration between Bulgarian economic organizations and Voest-Alpine, Austria's biggest state-owned concern, were discussed during the visit of Mr Herbert Apfalter, Chairman of the Board of Directors, to Bulgaria on May 5 and 6. The protocol signed in Sofia provides for an extension of economic collaboration in the field of engineering and metallurgy, as well as of joint ventures on the markets of third countries.

### Bulgaro-Kuwaiti Company

An agreement was signed on setting up a joint Bulgaro-Kuwaiti company, which is to promote tourist trade, freight transport and forms of air travel, including both charter and regular flights. Its name is to be 'Abattco' and it will have offices not only in Bulgaria and Kuwait, but also in other countries. This new initiative marks yet another step forward in the establishment of closer friendly relations between the two countries.

CSO: 2020/39

CZECHOSLOVAKIA

FOREIGN TRADE DURING 1983 REVIEWED

Prague HOSPODARSKE NOVINY in Czech 2 Dec 83 p 2

[Article by Gustav Nechanicky, worker at the CPCZ Central Committee:  
"Foreign Trade"]

[Text] The more effective participation of the national economy in the international division of labor and the strengthening of external economic balance are among the intentions of the Seventh 5-Year Plan. The 1983 foreign trade plan essentially provides for a favorable balance of payments in relation to the socialist countries and continues consistently along the road, already embarked upon, of the gradual restoration of balance in the area of freely convertible currencies.

As the preliminary balance sheet reveals, despite the demanding economic domestic and external conditions this year will end generally favorably in foreign trade. During the January-September 1983 period exports to the socialist countries increased almost 12 percent in comparison with the same period last year, although the plan had anticipated only a 3.7 percent increase. In accordance with the state plan, there has been more than a 13 percent increase in the export of engineering products. On the other hand, exports of nonengineering production increased on the average 8 percent. Imports from the socialist countries increased 12.5 percent during the first 9 months of this year, while the plan had anticipated a 10 percent increase. The percentage fulfillment so far of the import annual plan is the best in the last 3 years. The well-balanced mutual commodity exchange with the socialist countries can be regarded as positive.

These results have been achieved under some changed conditions in the socialist countries. Limits were imposed on the scope of capital investment projects and their structure has changed. In connection with this, the demand for machinery and equipment has also undergone a change. Foreign trade has not only registered some of these changes, but also in cooperation with the production organizations has adapted the export structure to the needs of these countries' markets.

A positive feature of the trend in foreign trade this year is the more rapid rate of increase in exports to the Soviet Union. The increase amounted to 13.4 percent during the January-September period this year, while the increase during the first 6 months in comparison with the same period of last year was 10.4 points. In connection with the development of world prices, major price changes have been taking place also in foreign trade with the socialist countries this year in the area of imported energy and chemical raw materials, whose biggest supplier is the Soviet Union. A permanent goal of foreign trade remains the minimization of the deficit in relation to the Soviet Union by desirably surpassing the export plan volume at least by Kcs 1.5 billion at FOB prices and by honoring the contracted export commitments in the structure stipulated in the protocol on commodity exchange during 1983.

In view of the fact that the balances in mutual trade relations with other socialist countries have been developing in favor of Czechoslovakia, it will be expedient to increase imports particularly of certain articles which lag behind the contracted commitments and also the imports necessary for the development of the national economy, including consumer goods for the enrichment of the domestic market.

Foreign trade with the nonsocialist countries developed less favorably. The mutual commodity exchange with this area, and particularly our potential exports, were affected by the complex situation on the world capitalist markets with the continuing excess of supply over demand and the resulting price reductions. Our exports to the nonsocialist countries during the January-September 1983 period amounted to 100.4 percent of the export volume attained during the same period in 1982. However, the state plan export target for the first 9 months of 1983 was met by only 72 percent. The loss of three points was caused primarily by engineering exports, while nonengineering sectors, due to the deliveries of chemical and metallurgical products ahead of schedule, fulfilled 74.6 percent of the annual export plan.

In connection with the crisis development in the nonsocialist countries, difficulties arise with the sale of products of Czechoslovak processing industries. For these reasons, necessary economy measures have been enforced, which are reflected also in the area of imports. Imports from the nonsocialist countries during the January-September period of this year amounted to 99 percent of the volume during the same period last year. Maximum utilization of all raw and industrial materials, including those which are imported from the nonsocialist countries, coordination of investment projects with the import of machinery at an appropriate time, creation of optimum conditions for Czechoslovak exports on the markets of nonsocialist countries even through mutual linkage to imports, support and promotion of trade cooperation based on equal and mutually advantageous conditions--this is the substance of rational import policy which we pursue in relation to the nonsocialist countries.

A preliminary estimate of foreign trade results expected in 1983 warrants the conclusion that both the export and import plan in relation to the socialist countries will be surpassed, and that with concentrated effort and close cooperation of foreign trade organizations and production enterprises favorable proportions will be achieved in mutual trade cooperation with the Soviet Union. Ongoing work on the protocols on mutual commodity exchange with the socialist countries in 1984 indicates some qualitative changes in the development of mutual trade cooperation. Stricter criteria will be applied to the technical standard, quality and reliability of products and to the desirable standard of postsale service, including supply of spare parts. The emphasis is placed on the manufacture and import of progressive technological equipment which will make a substantial contribution to a rapid increase in social labor productivity and reduce standard consumption of energy and materials.

Necessary prerequisites are being created also this year for maintaining the trade balance in the area of freely convertible currencies. For further development of trade cooperation with the nonsocialist countries we must proceed from the premise that the economic depression in the capitalist economies is an objective fact. It is reality that must be taken into account. It is therefore important what conclusions will be drawn by foreign trade and production supplier organizations from that.

While we analyze foreign trade results expected this year, we must keep in mind the implementation of tasks during the next period. In relation to the socialist countries, there must be more flexible response to the changes in capital construction, to some new requirements, particularly in export of machinery and equipment. The volume of mutual commodity exchange must be purposefully increased, particularly with regard to the products of light industry, in order to augment the supply and assortment of these articles on the domestic markets of socialist countries. On a larger scale than previously, our production organizations must participate in the implementation of the program of development of the Soviet Union, in the construction of light and processing industrial plants, in the food program, in soil improvement projects, and so on. The expansion of economic and trade cooperation with the USSR must be more purposefully based on additional specialization and cooperation agreements.

We must regard as a permanent objective the expedient adaptation of production and sales to the needs of the world market, and this must be the basis of the export efficiency of our economy. This will require the consistent implementation on schedule of export programs based on innovation and higher technical parameters, on new production technologies, and so on. This was made quite clear again at the Eighth Plenum of the CPCZ Central Committee, which dealt with a more speedy practical application of research and development results.

10501  
CSO: 2400/141

CZECHOSLOVAKIA

PRAISE ALONE CALLED INADEQUATE INCENTIVE TO ADVANCE R&D

Prague HOSPODARSKE NOVINY in Czech 25 Nov 83 p 5

[Article by Eng Kamil Novak, Federal Ministry of General Engineering, and Dr Eng Svatopluk Kostelecky, Research Institute for Engineering Technology and Economics: "For Outstanding Achievements Praise Alone Is Not Enough"]

[Text] There were enough possibilities of financial support of technical invention and of implementation of research and development advances also in the past. Their scope has recently been expanded through the issuance by the federal government of principles and rules of experimental verification of measures for the acceleration of R&D advances (CSSR Government resolutions No 200/1982 and No 1/1983) and the subsequent guidelines of the Federal Ministry of Labor and Social Affairs No 314-2472-3118, 130483 of 19 July 1983 on increasing workers' financial incentives for the acceleration of R&D advances.

In the area of base salaries, the existing regulations have already made it possible to determine the base salary within the bracket of the nearest higher salary level for the graduates of secondary vocational schools and colleges in demanding disciplines who perform selected functions in the area of science, research and development. The workers with college education in the 11-16 salary level with at least 15 years of professional practice, who are assigned predominantly very demanding work usually of creative technical nature and who are recognized experts in their field, can be included in the salary level one degree higher than listed in the catalog. The salary scale with the upper limits increased 10 percent can be applied to scientific research (development) workers with research and development scientific-technological qualification and also to workers with demanding college education working in the production organizations' departments of research, development, engineering design and some other departments, if they meet the required qualification and constantly achieve good work results. Furthermore, it is among other things possible to pay also workers in the area of technical development personal salaries exceeding by as much as one-third the upper limit of the bracket in the respective salary level.

## Broader Possibilities

In the experimental verification of measures for acceleration of R&D advances there is now a new possibility of granting for a limited period fixed in advance a personal salary up to Kcs 7,500 per month to creative technical workers in the departments implementing the tasks of technological development who are on the 13th or higher salary level, fulfill complex tasks of the plan of scientific and technological development, and who by their work results over a long period have made an extraordinary contribution to raising technical and economic standards in their respective field.

Another new feature is the provision on making use of brackets within the same salary level. The executive and qualified, especially creative workers who solve and implement the tasks of technological development and rationalization should be on the average granted, within the brackets of the same salary level, proportionately higher base salaries than other workers on the same salary level, naturally while observing their consistent differentiation depending upon the results of their work.

Of irreplaceable importance for financial incentives is the increasing of the earning rate above the salary level in question to the originators and executors of R&D advances. In more detail than in the past are in the above documents elaborated the indicators to which bonuses are linked. The same is true of the principles of differentiation of bonus rates for the solution and implementation of tasks of the plan of development of science and technology as well as of the differentiation according to the merits in the distribution of the resulting bonuses.

A new and for practice important principle concerns the average amount of bonuses for the solution and implementation of tasks of the plan of development of science and technology. The bonus rates must be set in such a way that individuals will get bigger bonuses than the production and managerial workers in the same salary class. The application of this principle will in the final analysis eliminate the present lagging behind of workers in the preproduction departments in earnings which amount to the salary component above the salary level in question.

The possibility is thus offered to grant to the heads of departments engaged in promoting technical progress, in addition to the bonuses linked to the results achieved by the entire department under their supervision, also part of the bonuses for finding the solution to and implementation of individual tasks of the plan of development of science and technology, if they themselves were members of the research and development teams, and performed these duties personally. In determining the amount of the bonus, it must be considered whether work in the research or development team is or is not part of their regular duties.

In addition to the bonuses for finding the solution to and implementation of tasks of the plan of development of science and technology which are differentiated depending upon their complexity and standard of implementation,

the new regulations permit the granting also of one-time and extraordinary bonuses on a larger scale than before:

--in the form of extraordinary bonuses for a particularly successful solution or implementation of tasks of technical development as, for example, if their effect is significantly greater than anticipated or as a token of special social appreciation. These bonuses can be granted even if the special compensations fund has been depleted and there is no limit on the amount of the bonus given to the individual;

--in the form of bonuses for a successful solution of problems of technical development from the ministry's detailing reserve. Bonuses in the amount of Kcs 5,000-20,000 to individuals for one task can be granted in the Federal Ministry of General Engineering by general managers who have been instructed to inform the minister of the bonuses granted within thus delegated jurisdictions. The minister of general engineering decides individually on the basis of a properly documented proposal by the appropriate general managers on the bonuses within the Kcs 20,000-50,000 range.

#### Measures by the Ministry

By its communication No 18/1983 of 9 August 1983, the Federal Ministry of General Engineering issued the "Principles of Personal Financial Incentives for Achieving and Implementing R&D Advances." In addition to the instances already in effect, they list new possibilities of financial appreciation of workers who find solutions to and implement tasks on the plan of development of science and technology, and also the rules for making use of these possibilities. The annex to the principles cites some examples:

--of intraenterprise guidelines for financial incentives for solving the problems of technological development and implementation of solutions;

--of the method of granting bonuses in management upon attaining the program objectives;

--of the choice of key and qualifying indicators of R&D advances for remuneration of managers of economic organizations and heads of intraenterprise departments, and finally the rules for remuneration of comprehensive task forces for their contribution to R&D advances.

By its communication No 18/1983 the Federal Ministry of General Engineering instructed the general directorates of VHJ's [economic production units] and the organizations directly supervised by the Federal Ministry of General Engineering to ensure the application of these principles in determining personal financial incentives within their jurisdiction depending upon the conditions as of 1 September 1983 but not later than 1 January 1984.

## To Manage and To Control

The issuance of principles, rules, procedures and examples by itself is not a guarantee that the planned results will be achieved. It is likewise necessary to check how the decisions on these matters are implemented in the subordinate organizations. We therefore anticipate the establishment of a system of controls at the general directorates, enterprises and plants in the interest of a consistent implementation of adopted resolutions. However, these controls cannot discover everything.

Controls can aim at the observance of mandatory provisions, such as whether functions were correctly classified, whether the indicators for granting bonuses for fulfilling the tasks of the plan of development of science and technology were properly chosen, whether the bonuses were correctly granted in accordance with the compliance with the chosen indicators, and so on. Controls can also examine whether the limits specified, for example, for personal salaries, for the amount of bonuses from the ministry's detailing reserve, and the like, were not exceeded.

In all these instances specific corrective measures can be ordered which will ensure the observance of centrally issued regulations.

It is a different situation in those instances where general wage regulations leave room for the decisions by the lower levels of management. If it is ordered to differentiate markedly the anticipated amount of bonuses for finding the solution to and implementation of tasks according to the time spent on it and their complexity, contribution to the financial position of the organization, anticipated technical-economic parameters of the final solution and aspects of wage policy, controls may insist on the establishment of a definite system of evaluation of tasks, but the actual evaluation of this system already is beyond the possibilities of wage control. The situation in controlling a differentiated distribution of a collective bonus for completion of the project among the individual workers of the team is similar.

On the basis of past experiences we can say that the most important problem faced by controls is to determine what use is made of the possibilities of preferential treatment of workers who successfully solve the problems of scientific-technological progress. We had to state upon completing controls already in the past that, for example, workers in research, development, engineering and so on to whom the salary bracket with the 10 percent increase in the upper limit applies do not actually receive higher salaries than workers remunerated according to the normal, unextended salary scale. We also stated that workers in the preproduction stages are paid personal salaries only exceptionally. We could not judge, however, whether it was so because there were not many outstanding workers or whether the people in charge did not feel like paying higher salaries.

### Change in Climate Is Necessary

Effectiveness of R&D economic incentives does not depend only on the quality of wage regulations. It depends primarily on how these regulations are applied and this is given by the importance which is attached to R&D not in verbal declarations, but in concrete practical management. Our experience confirms the truthfulness of statement by Comrade Milos Jakes at the Eighth Plenum of the CPCZ Central Committee, when he stressed the need to create everywhere a social climate for a broader application of R&D advances. Really effective R&D economic incentives are possible only in combination with effective and committed management in creating a demanding innovation climate, in an atmosphere of courageous creative search and irreconcilability with conservatism and passivity--to quote the words which were heard at that session.

Making full use of all possibilities of economic incentives is possible only on the part of a management that is sufficiently demanding in the formulation of goals which are to be attained in the area of research and development and in the control of achieved results. It must not lack the will (and capability) to evaluate individual contributions to R&D advances justly and must have enough courage to reward both financially and morally the most outstanding workers.

10501  
CSO: 2400/140

## PROBLEMS WITH NEW PRODUCER GOODS DISTRIBUTION SYSTEM DETAILED

Warsaw GOSPODARKA MATERIALOWA in Polish No 17, Sep 83 pp 448-451

[Article by Jerzy Owczarek: "Controversy Surrounding the Required Producer Goods Distribution Management System"]

### [Text] Growing Difficulties with Obtaining Materials

According to studies conducted by a group of experts at the request of the United Nations,<sup>1</sup> during the period from 1970 to 2000 there will be a tremendous increase in the worldwide use of materials. It was calculated that the demand for copper will increase 4.8 times, bauxite and zinc--4.2 times, nickel--4.3 times, lead--5.3 times, iron ore--4.7 times, crude oil--5.2 times, natural gas--4.5 times, and lastly, coal--5 times.<sup>2</sup>

The above data shows that forecasts were made based on consideration of the impact of changes in the manufacturing technology that was possible to estimate. In their evaluation experts also considered a possibility of applying material substitutes, improved effectiveness in the use of materials, and development and improvements of methods of recycling and managing secondary raw materials. Furthermore, they assumed that regeneration of many raw and other materials should reach about 50 percent of the recovery level.

Expert calculations show that even though more economical manufacturing technologies and efficient use of raw and other materials are being introduced, "during the last 30 years of 20th century the whole world will consume three to four times more of those materials than it did since the dawn of civilization."<sup>3</sup>

The prospect of such a drastic rise in the world raw material consumption has many implications for Poland. First of all, we should start searching for substitutes, especially for those raw materials that can be obtained only from imports.

The most import-intensive branches of the Polish economy have traditionally included: refinery industry--93 percent of the foreign exchange charge; sea transport--over 60 percent; baking industry--about 60 percent; fodder industry--almost 60 percent; cotton industry--about 55 percent; and sugar,

fertilizer, rubber products, and paint and varnish industries--about 50 percent. The industry producing machinery and equipment for the fuel industry and electrical power engineering machinery industry equals about 47 percent of the foreign exchange charge. All listed industries, except the cotton industry, are mostly based on imports from the second payments area.

The second area of activities should consist in decreasing material-intensiveness and power-intensiveness of the national product. For example, our economy, in its present condition, consumed, for 1,000 dollars of the national product, over 3 times more steel, over 2.5 times more electric energy, and over 2 times more cement than France. Comparisons with other highly developed nations are even less favorable.

Thirdly, I believe that possible solutions should be sought concerning the decreasing level of material resources. They are needed to free a part of the frozen national product for other, socially justified objectives, such as housing construction. If the reserves are decreased countrywide by 10 percent, the obtained resources will equal almost one half of the value of resources earmarked for 1 year's worth of housing construction.

Improving the national economy's producer materials and equipment procurement system is the next, fourth, very important area of concern. If the efficiency with which the producer goods transactions units function increases, fixed date deliveries will increase as well. This, in turn, should lead to less tension in producer goods management and a more stable flow of materials. As a result, cases of "hoarding" and making purchases for "just in case" that are detrimental to the consumption level will be eliminated. Nobody will be interested in creating reserves on any level of producer goods transactions, since on every level materials will be simply available at the enterprise's request.

To remedy the problem of high material consumption, experts conducted a worldwide evaluation of the level of natural resources. Neither new material sources nor new undocumented deposits were considered in the evaluation. The results show that it is likely that lead and zinc ores will be fully depleted by the year 2000. There should not be much problem concerning other ores, however.

Large-scale problems are not expected concerning energy resources, either. For example, the world reserves of crude oil currently equal almost 30 percent more than the world economy will require up to the year 2000.

It should also be considered, however, that the search for raw materials will be directed deeper and deeper into the earth, which will increase mining costs. Thus, raw and other materials will constitute a very strong determinant of our economy's developmental capacity.

Using the general raw material situation in the world as a background, I want to give my attention to one area of current and future difficulties that await solutions, i.e., the national economy's producer materials and equipment procurement system.

Was the Best Possible Choice Made Concerning the Producer Goods Management System?

This question often appears in direct dealings with enterprises. It implies an accusation that the Office of Materials Management proceeded too carefully concerning its reform solutions. It is extremely difficult to clarify premises that had to be taken under consideration while problems surfacing in the producer goods management system were being solved, when the matter is defined this way. Many of those evaluating the current implementation stage of the reformed producer goods management system do not want to accept obvious truths. This is because the following premises have to be accepted:

--every legal act is a result of a compromise to which all theose interested in the problem have to come;

--as a rule, the process of formulating systems-type solutions lacks sufficient empirical data, and it is not possible to evaluate it as soon as it begins to be carried out;

--at that time our economy's current producer goods management system constituted the only solution that was possible to accept, and its life ie limited in time; radical solutions were not possible while our economy was deeply shaken and there was danger of exposing many small enterprises fulfilling socially useful functions to negative results;

--introduction of barriers for some and "necessary protective covers" for others was dictated by the necessity of a dramatic choice: what should be saved first?

--when there is sufficient flow of producer materials, discussions concerning the choice of a "better system" will not be necessary; currently this happened concerning the cement, fertilizers, and woodlike panel delivery capacity;

--clear vision in looking at a problem may radically change when the vantage point from which the problem is viewed is changed; even in the same ministry the undersecretary of state who monitors income sees the problem differently from the undersecretary of state interested in expenditures;

--intentions are not always pure and chivalry is seldom observed in defense of our own interests, which was manifested in particular when buyers struggled to be included in nominal buyers' lists;

--all legal regulations only serve to make laws but do not ensure respect for them, which is a problem in its own right;

--even the most precise and carefully prepared information has no chance of reaching all interested persons in its original form. The "grapevine" rule always interferes, and it is never known how much conscious lying has been involved. Thus, it is important to cut down on deformations as much as possible.

Examining our question in this context allows for a more businesslike discussion. If the system were regulated solely from the Office of Materials Management's point of view, it could have an entirely different form. For example, distribution and compulsory brokerage would cover slightly different lines of materials and "monopolists," i.e., organizations in charge of materials transactions entitled to compulsory brokerage concerning producer materials transactions, would not number 29 for sure. Also, founding bodies could change for many transactions units. However, those who reject the idea claim that the founding body does not have any impact on the system's functioning and they reject all suggestions of changes as well.

This is true in theory, but the reality of daily life corrects even the Council of Ministers' most accurate resolutions. Extremely biased decisions are not rare. Allegedly approved by "the majesty of the law," those decisions, contrary to government intentions, strengthen the position of the monopolist who "accidentally" happens to be a part of a given ministry. The following example can hardly be interpreted in any other way. The Ministry of Metallurgy and Engineering Industry is responsible for the operational program of supplying agriculture and the food industry with machinery, equipment, and transportation means, as well as their spare parts, batteries, and tires. This ministry views articles produced by the ministry's enterprises as part of the program, but it does not view it as part of the program when the same articles are produced by a different industry. As a result of this attitude, transaction units that have a right to compulsory brokerage--especially those whose founding body is the ministry--break the law by refusing to supply enterprises that do not belong to the ministry even those enterprises order their materials according to requirements specified in the paragraph 6 of Council of Ministers resolution No 226. Such cases--even if they were rare--could cause destruction of the producer goods management system and affect the credibility of the law. This significantly complicates the economic reform implementation. The antimonopoly law is urgently needed and its introduction should effectively hinder such moves of branch monopolists.

In spite of the problems discussed and some threats to the system's implementation, the question of whether the best possible choice was made concerning the producer goods management system currently in use should be answered as follows: "The lesser evil was chosen in view of the present economic situation. The basic advantage lays in giving enterprises a chance to make direct contacts, which are still monitored to some degree."

## Questions Most Often Asked

During many meetings that I had a chance to conduct with representatives of enterprises, many questions were asked concerning the producer materials and equipment procurement system. Those questions clearly show that there is a discrepancy between the regulations required and the reality of daily life. I will try to analyze the situation using a few questions chosen from among many. It is worth mentioning that questions were asked after information on the system was given.

### Question No 1

Do the central authorities believe that it is economically justified to establish and condone the existence of additional procurement brokers for materials covered by brokerage in view of the drastic shortage of producer goods? Is there no doubt that every broker creates his own reserves and, therefore, increases the general materials shortage?

This question, and the way it is formulated, shows that enterprises are under much pressure from branch procurement units which traditionally carried out that function under the command-distribution system of the economy's management. Those units now make efforts to continue performing this function (often dishonestly, it should be added). It is a struggle for survival for them. Similar impression was made on enterprises by actions of association's offices. Often the "encouragement" to use services of the association's office in obtaining supplies of materials consisted in blackmailing, such as "if you do not give us the right to supply you, you will not obtain the materials." There are examples of putting such "initiatives" in writing. Enterprises are not able to distinguish where the law ends and the arbitrariness begins. The central authorities are blamed for all problems as a result.

### Question No 2

Can the broker, authorized by enterprises, become a buyer of materials? If yes, then does the broker's share of materials include those of all enterprises he represents, and is he supposed to divide the materials among enterprises? If yes, then is the chain of brokers limited?

This question contains the enterprise's justified fear of unfounded cost increases, since every broker wants to be paid for doing his job, and the sum is considerable. At the same time, the question shows that enterprises are not yet aware of their strength, and they still respect and honor the traditional hierarchy formed during the command-distribution-type management period. Units that have been founded to provide services and help enterprises do not have any rights of authority, according to legal regulations, and especially the 25 September 1981 resolution concerning enterprises, where the question of mutual dependence was univocally resolved. The broker acting for enterprises which authorized him to represent their interests has no legal right to determine the distribution

of materials. He can do it only by taking advantage of the lack of knowledge on the part of members of a given group of enterprises. If there are differences in the way needs presented by the enterprise are satisfied, the distribution can be conducted by the association's council rather than its office.

Formally, the chain of brokers is limited, and the wholesale trade permission can be given exclusively by the minister of materials management. In practice, intermediate levels appear based on voluntary agreements entered into by all enterprises supplied. Even though it is clear that the amount of goods that remains free to be used within the country's producer goods management system is shrinking, the number of procurement units did not get any smaller. Neither was employment significantly limited. Thus, it is obvious that the cost of brokerage concerning producer goods management trade must have gone up.

#### Question No 3

Does the Office of Materials Management plan any training pertaining to principles of materials procurement for employees of ministries and central offices?

This question shows that decisions adopted in this area are not always in accordance with decisions contained in Council of Ministers resolution No 226, which is the basis of 1983 materials procurement.

#### Question No 4

Why did the Office of Materials Management, which formulated Council of Ministers resolution No 226, not univocally define principles guiding the distribution of regulated materials that are restricted to economic subjects? Because an opportunity was created for authorizing various brokers, such creatures as associations, domestic associations, central boards, "Metal-budas," etc., can continue to act as buyers receiving shares of materials in their name. This opportunity is used by those bodies to rebuild the power of previous ministries, associations, etc.

This question clearly shows enterprises' fear that guarantees of two S's ensured by the 25 September 1981 resolution are not very real. It also contains a protest against large gaps left in the producer goods management system which may cause "the control to become a foothold for rebuilding the traditional command-distribution system," according to the evaluation contained in the "Report Concerning the Economic Reform Implementation During the First Half of 1982." This question also signals the existence of continuing opportunism of enterprises, which "do not want to be bothered" and do not take advantage of their legal rights. Instead, they wait for somebody else to take care of their basic needs. Just because enterprises can give authorizations does not mean that the authorized unit is eligible to be on the nominal list of buyers. Even if the enterprises' representative becomes such a buyer, he still does not have the right to distribute materials. It is high time for enterprises to start taking advantage of their legal rights.

Question No 5

What does the formulation "public and transport," contained in the list of operational programs, exactly mean? Does it include state enterprises' unorganized transport? Do repair plants have any guarantees of spare parts deliveries needed for car repairs if the production of those parts is not covered by the operational plan?

This question contains a nostalgic note concerning "the good old days" when the main effort of enterprises went into "the game to get in the plan" they conducted with the supervisory unit. It was based on attempts to acquire minimal tasks and maximal means. In the situation where the Central Annual Plan has not been divided among ministries, and ministries, in turn, have not assigned tasks to branches, some enterprises are dis-oriented and cannot act freely within the framework of binding legal regulations. In this specific case spare parts delivery is regulated, as an obligation to enter a contract, by the 27 September 1981 Council of Ministers resolution No 207 concerning general sale and delivery contract conditions (MONITOR POLSKI No 26, item 235).

It seems to me that all questions have one thought in common: the law is penetrating the economic practice too slowly and with great difficulty. A publishing initiative should be undertaken, which would make it possible, as it is done in Hungary, to purchase as brochures all basic documents, including the complete Council of Ministers resolution No 249 concerning the 1983 Central Annual Plan. The edition size should guarantee that documents will reach all interested enterprises. The popularization mechanism for basic legal acts will improve if the administrative transmission lessens its intermediate links and enterprises are able to reach source information directly.

Considering the worldwide raw-material situation, the waste in producer materials consumption that takes place in our national economy, and conditions in which these two contradictory but mutually dependent factors can correlate, it is my belief that the success of the economic reform will be decided by a new producer materials procurement system (actually, the definition "ensuring necessary conditions for implementing voluntary contractual transactions in the area of procuring producer materials for enterprises" may be more appropriate). I realize that the system has to be supported by a consistent economic policy pertaining to economic subjects.

FOOTNOTES

1. "Jutro Gospodarki Swiata--Raport dla ONZ" [The Future of the World Economy--A Report for the UN], in a compilation "Nowy Miedzynarodowy Lad Ekonomiczny" [The New International Economic Order], Warsaw, PWE, 1979.

2. We believe that this prognosis is exaggerated (the editor).

3. Ibid.

MACHINEBUILDING PLANT ECONOMIST INDICTS REFORM CHANGES

Warsaw ZYCIE GOSPODARCZE in Polish No 51-52, 18-25 Dec 83 p 7

[Letter to the editor from Mical Kanski, deputy director for economic affairs, MADRO Roadbuilding Machinery Fabrication and Repair Plant, Krakow]

[Excerpts] The package of government proposals modifying the groundrules of the economic reform have been sent to the Sejm.

On reading these various bills employees of public-sector enterprises who deal with economic problems on a day-to-day basis are asking themselves the simple question: what's going on here?

Why is it that once again no one wants to bother taking a look at the tortuous history of the implementation of changes in our country's system of rules governing the management of the national economy, and why is it that no one wants to draw any conclusions from this?

Why is it that over the past couple of years every time when reasons are given in support of changes in the groundrules of the economic reform the argument is made, in contradiction of the facts, that these changes are compatible with the spirit of the reform and serve to bring us that much closer to its ultimate configuration and objectives as originally conceived?

Why is it that the national government, which is responsible for running the national economy, wants to shift the whole burden of blame for the things that are going wrong with the economy onto business enterprises?

Why is it that we do not have enough patience to let business enterprises run their affairs in accordance with groundrules that would be left unchanged for a period of, say, 3 to 5 years?

If it really is necessary to change and modify these groundrules right now, then these rule changes should never be permitted to be retroactive! This is a matter of equity and fairness, not to mention ordinary pragmatism. Meanwhile, plans are in the works to exclude wage payments subject to FAZ [Vocational Activization Fund] taxes from the 1983 wage base.

During discussions with workers self-management officers one hears various critical remarks. For example, is it not enough that action has already been taken to raise food prices in 1984, introduce the income levelling tax (which affects those workers who are most productive), and tighten up on some of the other rules of the economic game? On top of all this is it still necessary to set up this retroactive FAZ guillotine? There is still time to withdraw these hapless proposals, but, if they have to be made law, only 1984 should be cited as the base year. That is, the changes should not go into effect until 1985.

The government's other proposals aimed at modifying the groundrules of the economic reform, especially those that pertain to prices, are sufficiently rigorous and go far enough toward making it hard to earn excessive profits.

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POLAND

BRIEFS

'THE FOUNDING BODY'. In numerous Polish legal documents, especially those related to the economic reform, one can often come across an expression "the founding body" [organ założycielski; parent agency]. In the language of law this term denotes a unit of central economic administration empowered to establish and supervise a state enterprise. This function is carried out by various ministries, e.g. Ministry of Mining and Energy, Ministry of Metallurgy and Engineering Industry, Ministry of Chemical and Light Industries etc. In addition to ministries, some other central units can also be authorized to act in that capacity; committees and central administration agencies, e.g. Committee for Radio and TV, Office for Maritime Economy. The voievodeship national councils can also perform this function. In the latter case, it is the voivoda (the governor) who is legally entitled to embody this function. [Text] [Warsaw POLISH ECONOMIC NEWS in English No 22, 30 Nov 83 p 7]

CSO: 2020/52

ELECTRIC POWER SUBSTITUTION EFFORTS CRITICIZED

Bucharest ENERGETICA in Romanian Jul-Aug 83 pp 356-358

[Article by Eng V. Nogali, deputy director, and Eng I. Stirbulescu, FEE office head, at IDE, Bucharest]

[Text] Increasing difficulties in obtaining various types of fuels on one hand, and the exceptional qualities of electric power (universal use, easy transformation into other forms of power and automatic regulation, convenience, and so on) on the other, have led to a great expansion in the uses of electric power as a substitute, utilizations in which conventional forms of energy or fuels are replaced with electric power or with an agent whose production requires electric power consumption (such as compressed air).

In many cases, such substitutions are clearly imposed by various ultramodern, high precision technologic processes, just as in many others, the substitutions can become sensible, immediately or in the long term, from an energy standpoint.

The present article will discuss only the cases in which the substitutions are unwise in terms of the public interest, becoming--due to poor design, execution, or utilization--obvious wastes of energy. We will not cover specific details of each technology, but rather analyze general principles whose inappropriate implementations continue to multiply the waste of energy.

Among the substitution utilizations of electric power, the most often encountered is that of electric heating, that is, applications in which the heat obtained from fuel combustion is replaced with that obtained from electric power through the intermediary of resistances, inductors, or arcs. Such uses are found in nearly all sectors of activity, with the largest applications in steel production and metallurgy for melting and heat treating metals.

The major shortcomings are:

I. In the greatest majority of cases, the form of energy being used is not selected on the basis of comparative technical-economic calculations, but is imposed by technologies whose energy criteria are unknown or incorrectly

known; even when comparative technical-economic calculations do exist, they are usually incorrect or replaced with simple erroneous references which lead to conclusions that are not supported by facts, in order to justify adopted solutions.

The most frequent errors derive from the fact that all the calculations concern solely the objective in question, completely overlooking what is happening at the level of the national economy, both in terms of investments in the national electric power system, and in terms of overall efficiency (in the case of electric heating devices, for instance, the calculations consider the efficiency of the actual equipment rather than overall efficiency, which is approximately three times lower).

The approach used by those who proceed in this manner is based on the mistaken premise that while hydrocarbons are in short supply and imported, electric power is plentiful and domestic, thus ignoring the fact that for electric power, both the effective proportion of hydrocarbons used to produce it, and the overall efficiency of its successive transformations, are incomparably lower than those of the actual electric heating devices; for these reasons, a number of adopted technical processes not only require more kilocalories at the level of the national economy than the rejected technologies, but also often create the paradoxical situation in which the desire to reduce hydrocarbon consumption by substituting electric power, in fact increases this consumption at the scale of the national economy as a result of the combination of yields and of the proportion of various fuels included in the production of electric power. In some sectors of activity the national economy is consequently forced to make available to plants in the electric power system greater quantities of hydrocarbons than those replaced with electric power; the non-trivial magnitude of this phenomenon bypasses all controls, where it is considered as a normal growth in electric power requirements and as a normal increase in the amounts of fuels needed by power plants.

II. Another shortcoming which should be stressed and which has certainly contributed and is contributing to minimize the importance of comparative technical-economic calculations, which it even makes unnecessary, is connected with the methodology for approving energy solutions, both for new industries and for expanding or modernizing existing ones.

As a rule, the approval agencies of MAGF are categorically opposed to solutions that involve the use of oil or natural gas, thus turning to electric power (as in the case of electric cooking ranges, the use of electric heating in steel production, metallurgy, or commercial units--to list only a few examples). What can the approval agencies of the MEE (Ministry of Electric Power) do in this situation? A refusal to provide electric power following a veto from MAGF approval agencies would be synonymous with curbing industrial development, even in the case of developments that are vital to the national economy. This has created the situation in which all energy approvals given in accordance with the provisions of Article 25 of RFUEE concern solely possibilities for supplying electric power, entirely overlooking the actual energy aspects of the requests.

III. From this unconditional use of electric power to what actually takes place is but one step: there appear and rapidly become widespread, electric heating devices and manufacturing processes that are insufficiently well analyzed from an energy standpoint, some of them true improvisations, savings initiatives that generate waste, technical processes that are not only poorly designed but even poorly managed, with negative energy repercussions. Quite often, from an energy standpoint, the modernizations of various operations or technologies are veritable regressions.

From a public interest standpoint, this simplistic approach to the problem, based on superficial appearances, resulting in haphazard utilization of electric power, renders unwise even solutions whose conception have a technical justification, and even more unwise those who do not: the melting of cast iron with an electric consumption of the order of 1500 kWh/ton is not an isolated incident, and has no technical justification.

Although the IDEB (Bucharest Enterprise for Electric Power Distribution) attempts to strictly apply RFUEE provisions for approving energy solutions, have led to some improvements in reducing specific electric power consumptions by imposing technical and organizational measures, they have ended up in failure for the following reasons:

The documents introduced in accordance with RFUEE provisions for obtaining energy approvals, have shown that not only consumers, but even such national research and design institutes as ICSITPSC are unfamiliar with ISPE (Institute for Energy Studies and Design) methods for comparative technical-economic calculations; for this reason, the conclusions of the studies were fundamentally invalidated by errors which are always in the same direction, invariably leading to the advantage of using electric power, even when the use of other fuels is more indicated.

Following the IDEB observations, the calculations were repeated, but even then with no guarantee of correctness since they contained data which we cannot verify and which continues to remain unclear: we were able to respond to technical arguments only at times and only partially, by resorting to comparisons, to data in the specialized literature to which we had access, as well as to brochures from other companies which manufacture more or less similar products. It should be pointed out that most often, the electric power specialists of users proved to be insufficiently aware of the technical points being discussed to be able to provide the information that would lead to a well founded decision.

Since for many technologists in particular, the conclusions of the present paper could appear outdated and in conflict with world trends, the following two points need to be made:

We cannot justifiably talk about an expanded use of electric power as a substitute, without taking into consideration the manner in which the electric power will be produced subsequently. With time, the balance will lean toward substitution uses of electric power, but a long time will have to pass until such a solution is accepted for an installation which will be discontinued before its utilization becomes sensible;

In the general case as well as in the special case of electric power--for a number of reasons whose broad lines at least, are known, and which do not bear emphasizing--a clear indication must be made for each type of utilization, of what must be done and what must not be done to frame specific consumptions of electric power within rational limits, with concrete specification of the limits and the measures to be taken for that end.

The general features briefly analyzed here lead to the need to adopt decisive positions against these substitution uses of electric power, which are not strictly justified from the public interest standpoint, but are expanded on the basis of fashion, convenience, or local interests contrary to the public interest.

In order to stem these unwise substitute uses of electric power, the following proposals are made:

- a) Adoption by ISPE of its method for comparative technical-economic calculations at electric power installations for selecting energy solutions, and dissemination of this method with compulsory application in all design institutes in the country;
- b) Compulsory instruction about efficiency calculations, of designers in the country's various design institutes, through MEE's CPL (Design Center for Projects), with instructors from ICEMENERG (Institute for Electric Power Research and Modernization) and ISPE that are specialized in these problems, according to the method indicated above;
- c) Confirmation for each project that the energy solution was selected according to the ISPE method by designers which are responsible for the results (as in the case of NPM and PCI--fire prevention);
- d) Compulsory indication in projects, of the major measures taken to maintain electric power consumption within sensible limits, with concrete indication of of the various maximum limits circumscribing the specific consumptions of electric power, under various assumptions of sensible utilization of the installation or installations in question;
- e) Creation of a national agency for approval of energy solutions, which would not be limited to forbidding certain fuels, forms of energy, or energy solutions, but would concretely specify the energy solution to be adopted, having the right--in order to decide with full awareness of the facts--to impose discussions and other solutions in addition to those proposed by designers, and to consult whenever it considers necessary, technical and electric power specialists from throughout the national economy.

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CSO: 2700/79

UNPROFITABLE FIRMS IN THREE REPUBLICS ANALYZED

Zagreb START in Serbo-Croatian No 385, 22 Oct 83 pp 30-33

[Group of articles by Boris Kutin, Mirjana Popovic and Dragoljub Zivkovic:  
"How We Produce Losses"]

[Text] Slovenia: They Have Sunk in Troubled Waters [by Boris Kutin]

The share of Slovenian losses in the Yugoslav economy is increasing steadily. In 1974 they amounted to 3.3 percent, they climbed to 9.4 percent in 1980, and in the first half of this year they reached 14.7 percent. Aside from that, over these 6 months it was in Slovenia that losses showed the greatest increase: a record of 88.2 percent. What do these figures mean? Is it really true that the prospects are the darkest for our most highly developed republic?

According to certain figures that is exactly the case. For example, 152 organizations of associated labor with an aggregate work force of 23,833 ended 1980 with a loss. After the first 6 months of this year 325 organizations of associated labor with an aggregate work force of 61,155 were "under the water." It is assumed that the losses will continue to increase. At the half-year mark they were 29 percent higher than in the year-end statement, and at the end of the year they will probably be half again as large as they are now: 10.9 billion dinars. Should these predictions be borne out, the sum total of this year's losses in Slovenia would amount to about 15 billion. A very large sum indeed.

On the other hand Slovenian losses can also be interpreted in another way, one that is encouraging. Thus Slovenian organizations of associated labor in the economic sector had a share of 14.7 percent, as we have mentioned, in the total losses of the Yugoslav economy, but at the same time they realized 16.9 percent of the gross income and 17.7 percent of the income in the economy of the SFRY. Losses in Slovenia, along with those in Serbia, show the smallest share relative to gross income and income. In Montenegro losses even exceed accumulation by all of 49.3 percent; in Kosovo the total losses are almost equal to accumulation. By comparison with the resources realized for accumulation, losses were also high in Macedonia, where they amounted to 67.2 percent, and in Croatia, where losses amounted to 47.0 percent of accumulation. In Vojvodina losses were 33.7 percent, in Slovenia 26.8 percent, in

Bosnia-Hercegovina 22.9 percent and in Serbia 19.4 percent of resources realized for accumulation.

Republic (Province)	Losses (in mil- lions)	Index	Share in SFRY Economy			Share of Losses in	
			Loss	Gross Income	Income	Gross Income	Income
Bosnia-Hercegovina	6,183	124.2	8.3	13.6	13.5	0.8	3.9
Montenegro	2,693	128.7	3.6	1.7	1.6	2.7	13.8
Croatia	26,324	182.8	35.3	23.9	25.2	1.9	8.9
Macedonia	5,545	165.2	7.4	6.5	5.4	1.5	8.7
Slovenia	10,927	188.2	14.7	16.9	17.7	1.1	5.3
Serbia proper	11,791	184.3	15.8	24.8	24.8	0.8	4.0
Kosovo	2,175	101.2	2.9	1.9	1.8	2.0	10.4
Vojvodina	8,968	166.2	12.0	10.7	10.0	1.5	7.6
SFRY	74,608	167.4	100.0	100.0	100.0	1.3	6.3

It is interesting that those operating at a loss were criticized much more harshly a few years ago when the sums involved were much smaller, there were many fewer such organizations of associated labor, and their aggregate work force was smaller than it is today.

We might enumerate the most frequent causes of the occurrence of losses as follows:

In first place are expensive and inefficient investment projects; actually the investment projects had been properly weighed, but poorly prepared and carried out, so that the construction time was prolonged and the purchases of equipment were postponed. This in turn led to overruns and the taking of credit in Yugoslavia and abroad, as a rule under increasingly unfavorable terms and conditions. Expensive investment projects were also a consequence of the essentially altered conditions for the conduct of business during the actual course of construction of the investment projects.

In the second group were those who in past years had built mainly on credit and at the same time did not correctly judge the effectiveness of the investment project. Organizations of associated labor were thereby overburdened with the repayment of high interest, and those who had taken foreign loans had a still greater burden because of the change in rates of exchange.

There were also many of those who fell into losses because sources of raw materials and energy had not been secured and because they were dependent upon imported raw materials and technological fuels.

Underutilization of production capacity, which in most cases resulted from disturbances in the supply of raw materials and production supplies, the poor organization of work, and the irresponsible handling of facilities and equipment, poor work discipline, poor use of worktime, the inappropriate composition of personnel with respect to skills, and low product quality--

represented the fourth most important "loss package." As a rule these were subjective shortcomings, since the causes enumerated occurred only exceptionally because of outdated and completely worn-out production equipment.

In fifth place were production programs which had not been sufficiently verified on the market, and which often were a consequence of differing localistic interests, when certain production programs were not well planned, or when the market and its demands had not been sufficiently monitored, and real capabilities for development had been neglected.

At the very bottom of this ladder were unbalanced relations in income sharing and other causes, among which we should mention first disproportions in prices, failure to honor self-management accords, the rapid change in conditions for the conduct of economic activity and lack of coordination in economic policy measures. This was also considerably affected by the system of foreign economic relations: organizations of associated labor that did more exporting realized a lower income on foreign markets than they would have had on the domestic market.

The principal culprit today, far ahead of all the others, is the price. Everything revolves around it, and until this issue is settled, there is practically no hope of better days. The disproportion between prices of raw materials and production supplies and the prices of finished products is obvious even at first glance. That is, expenditures of organizations operating at a loss rose 46.4 percent, while gross income rose 36.3 percent. The growth of expenditures by those operating at a loss were, then, all of 10 index points higher than the growth of gross income.

Very interesting statements have been made in this connection by Egon Zizmond, senior lecturer at the Junior Postsecondary School of Economics and Commerce in Maribor, who in the most recent issue of the scholarly journal NASE GOSPODARSTVO presents the relations in the realization of income in the Slovenian economy. The article presents in detail a method of determining the position of any organization of associated labor or any economic activity in the realization of income, that is, in primary distribution. The principal indicators of the analysis are the level of income and the level of productivity, the level of income representing a synthetic expression of two basic indicators contained in the Law on Associated Labor--income per worker and income relative to capital employed. With the help of these indicators the relative income position of the various sectors of the Slovenian economy was calculated in comparison with the respective sectors of the entire Yugoslav economy. The final conclusion was that prices are the principal factor affecting relations in the realization of income. Here is what he wrote:

"It is disturbing that the level of income in the Slovenian economy has been dropping very rapidly in recent years: in 1980 the income of the Slovenian economy was at a level of 121, and a year later it had dropped to 115. All the most important economic sectors taken separately give approximately the same picture as the entire economy. This means that restrictive economic policy measures are having a stronger limiting impact in Slovenia than in the entire area of Yugoslavia and that stricter monitoring of producers' prices

is succeeding in Slovenia. This certainly detracts from the level of income and the reproductive capability especially. This means a weakened position in the realization of income, and a possible decline in relative productivity is not to blame for this, but rather the more intensive administration of the restrictive measures, which is weakening the position in primary distribution."

It is quite certain that this assertion cannot be discredited for having taken the wrong approach, nor can it be said to be biased. There is much evidence, too much, to the effect that prices have indeed been kept in rein best in Slovenia. But, nevertheless, at least as far as losses are concerned, it would be too dangerous and too simple to accept this explanation as the only possible one. That is, it is very obvious that there are also a great number of other culprits to blame for the red ink.

For example, more than half of the losses in the Slovenian economy pertain to the "Gorenje" Complex Organization of Associated Labor in Titovo Velenje: the losses of the Household Equipment Factory, Commercial Services Department, of GLIN [Forest Management and Timber Industry of Nazarje], in Nazarje, of Varstroj in Lendava, and of TIKI in Ljubljana amounted to 5.51 billion dinars; almost half of this sum resulted from the losses of enterprises which "Gorenje" established abroad.

Nor is any comment needed concerning the negative differences in rates of exchange. They amount to 2.1 billion dinars for those operating at a loss, and another 2.8 billion for all the "profitable" organizations. But, whereas differences in rates of exchange increased sixfold for those operating at a loss as compared to the first 6 months of last year, they increased incomparably less, 143 percent, for the "profitable" organizations.

The example of IMV [Motor Vehicle Industry in Novo Mesto] is also eloquent. Just last year this organization was in an utterly desperate position. A year ago it held a solid second place on the list of those operating at a loss (the year before last it was even in first place). Now it has fallen to 11th place, but it is a much more important datum that this year its losses amounted to only 145 million, which is not even 10 percent of its losses last year. Prices contributed very little to this kind of turnaround.

However, a connection can be found between those operating at a loss and increased exports. The share of those operating at a loss in sales on the foreign market increased from last year's 11.6 percent to 14.7 percent (that is a 26-percent increase), while for the "profitable" organizations the increase was from 7.9 to 9.5 percent (20 percent) of gross income.

Certain other comparisons are also interesting. Income of those operating at a loss rose only 12.4 percent, while for the other organizations it rose 36.3 percent. The ratio of expenditures to gross income was 92.1 percent for those operating at a loss, while for the organizations which showed a profit it was 77.4 percent. The following costs showed a particular increase for those operating at a loss: raw materials and supplies consumed 93.2 percent (only 37.5 percent for the "profitable" organizations), energy 37.1 percent

(24.2), and the purchase value of goods sold at wholesale 53.0 (38.9 percent), and so on.

Organizations of associated labor which operated at a loss had to divide up almost half of their income among other obligations charged to income. That is, interest on credit is eating away more and more income. In the first half of this year they accounted for all of 28.4 percent of the income distributed, while for the "profitable" organizations it had a share of only 10.3 percent. The difference in depreciation is also great. Whereas those operating at a loss set aside 7.9 percent of gross income for it, it cost the "profitable" organizations only 3.0 percent.

As for personal incomes, it hardly makes any difference whether an organization is operating at a loss or not. To be sure, there are differences with respect to their growth, but they are far from the differences which would have occurred if the laws and social compacts had been honored. Thus funds for personal incomes increased 21.3 percent for those operating at a loss and 32.7 percent for others. Average personal income was 15,436 dinars a month for the former and 15,811 dinars for the latter. Nor is it anything new that there are cases in which those operating at a loss in certain industries have personal incomes which are higher than the average. The organizations that stand out in this respect are those in transportation and communications, where personal incomes of those operating at a loss rose 32.5 percent, while those of others in that sector rose only 19.3 percent. Those operating at a loss were also nominally ahead of the "ordinary" organizations: they had 17,839 dinars a month, while the others had only 16,523 dinars.

A great many more figures of this kind might be ferreted out, but that would not make the final picture much clearer. What is more, it might even be cloudier than now. That is, it is quite obvious that the losses (including the Slovenian losses) are a phenomenon which have in common only the red ink, while all the rest is extremely diverse. They are all in the same basket--but not in the same bind: from those whose income is being swallowed up by the government or administration, including those who are operating poorly (yet they are not too bad off for all that) and very poorly, to those which are still paying for their old sins, as well as those which are "under water" accidentally, because of a momentary set of circumstances. So long as that is the case, counting those which are operating at a loss (especially when this is based only on the bare numbers) will not be much more worthwhile than whipping a dead horse.

#### Croatia: Interest Greater Than Losses [by Mirjana Popovic]

"The tendencies toward larger losses are seriously threatening the constructive effects achieved in exports, agriculture and tourism and they are having ever greater repercussions on dinar liquidity and the possibilities for paying personal incomes!" was the warning issued on 5 October in the last plenary meeting of the Croatian LC Central Committee, accompanied by the assertion that losses in current business operation "are the most vulnerable area, one in which the overall stabilization efforts of the society have not achieved any very significant shifts."

The economy of Croatia, like the economies in all our republics and provinces (in all of them losses in the first half of this year increased to a greater or lesser extent by comparison with the same period of last year), with its growth of losses in current business operation is reflecting the increasingly difficult conditions for operation and for creation of new values. To be sure, a certain percentage of the losses resulted from factors which cannot be placed over the common denominator of the more difficult "general business conditions," so that it was concluded at the plenum that there was a need to accurately discriminate which and what part of the losses "came from erroneous internal distribution of income, from position in primary distribution, and how much from poor business operation."

At present there are no such overall analyses, but it is quite well known that certain organizations, especially those that have been operating at a loss for many years, almost as a tradition, themselves bear a considerable share of the responsibility for the poor business results. That is why "temporary measures" have been introduced in some, emergency financial rescue programs are being worked out in others, and still others are waiting for someone "outside" (since they themselves do not have the strength) to help them distinguish the "subjective" from the "objective" causes of losses. But regardless of the size of the business losses which the various work organizations have created because of their own inability to adapt to the requirements of the market, to get better organized, and so on, it is indisputable that the obviously worsened business conditions of the economy have made their situation essentially more difficult this year. Many organizations which have operated their business well for years have fallen into financial troubles.

The economy of Croatia (and the situation is similar in the entire country, the difference is only a matter of percentages) is doing less, is producing less than last year. For example, industry has been compelled to cut back production all of 3.4 percent (in the first half of this year, compared to the same period of last year; over the first 7 months, that is, from January to the end of July this year, production fell off 3.6 percent). As many as 23 of the total of 34 branches of the industrial sector, comprising more than two-thirds of the republic's total industrial output--did less work and created less than last year. It is not difficult to conclude what kind of relation there is between the decline of output and the growth of losses. Machines cost money whether they are operating or standing idle, payments against credits have to be paid regardless of whether goods have been produced and sold, the people employed have the right to at least a portion of their personal incomes, especially when they themselves are not to blame for the lack of production supplies or electric power, and so on. And actually it is the inadequate and irregular supply of the necessary materials to the economy that is the principal cause of the lag in production, of the disturbances destroying ambitions for higher labor productivity. Irregular supply compels organizations of associated labor to stockpile production supplies--precisely when financially they can hardly make ends meet--and thus they tie up huge amounts of capital (they buy when they can and buy what they can get), the inventories pile up, usually mismatched, and the considerable share of work in process puts an additional burden both on production buildings and on the funds of producers.

Why is it that there are no production supplies, raw materials and energy sources--this is a story repeated a thousand times already, one which takes on the solidity of reality only in production plants, where machines just started up are turned off, when the workers go off for annual vacations they have been forced to take and when they await the payment of personal incomes with anxiety. Imports are restricted to amounts which do not cover even the minimum for production, current payments for imports are blocked in order to meet fixed and guaranteed obligations abroad, and commodity credits have not come up to expectations. Partly because the economy cannot take them because of overindebtedness, and partly because of the complicated procedure (it took the federal administration months to simplify that procedure).

This kind of situation in production and the large outflow of accumulation to pay off foreign debts have brought about a deterioration of the financial position of organizations of associated labor. This at the same time opened up a new round of troubles: in spite of the increasingly unfavorable conditions, the economy was forced to take additional financial credits. The interest rate policy which has been adopted (which is supposed to keep pace with the rates of inflation) signified a rise in the general discount rate of the National Bank of Yugoslavia, and that from 14 to 22 percent, and then to 30 percent. Interest on earmarked credit (from primary note issue) also increased: to 18 percent on export transactions (it was 4 percent at the beginning of the year), 20 percent for agriculture (it was 7 percent at the beginning of 1983), and to 22 percent for other purposes. The rise in interest rates of the National Bank of Yugoslavia, along with the higher rate of interest which banks must pay on deposited funds, has also increased the cost of bank credit to 35 percent. But the Croatian economy can cover barely 15 percent of the total working capital needed from its own sources, and it must borrow the rest, regardless of the rate of interest and the terms and conditions. If, of course, it wishes to do business at all. The result: over the first 6 months of this year the economy set aside more than 40 billion dinars for interest alone (this is 65 percent more than all the losses recorded in the republic's economy over the same period). Thus payments of interest in the first 6 months of this year, compared to the same period of 1982, rose nearly 80 percent. What would have happened if the economy had not been forced by circumstances to behave thrifitly?! This year, in spite of the increasingly difficult business conditions, it has borrowed from the banks only 18 percent more than last year to provide itself with working capital, while in 1982 it took 35 percent more credit than in 1981 (all the comparisons pertain to the first 6 months of this year and last year). The consequences are clear even without any special mathematics: liquidity is essentially worsened, there are more and more organizations whose giro accounts are blocked (301 organizations in January of this year and 384 work organizations by July), and obligations are increasingly difficult to discharge to banks and creditors. In part because of the restrictive measures of monetary and credit policy, in part because of nonpayment of accounts payable to them, the banks are also falling into difficulty, and they are not able to keep pace with the economy's need for working capital required to back up production. It is a vicious cycle of being without funds; an additional burden is the immense outflow of the economy's accumulation to pay the dinar equivalent of interest on foreign credits. That is, the continuous devaluation of the

dinar is enormously increasing the expenditures of organizations to pay for current imports, but also to repay credit taken abroad.

When all this is summed up, the following trend of events is obvious: the economy is left less and less of the income it has earned, the figures range about 59 percent, and business conditions offer no hint (in spite of the measures announced by the Federal Executive Council which in 1984 would supposedly restore that percentage to at least 63 percent) that the situation will change essentially in the near future.

The following figures can serve as an answer to those who say that the economy has fallen into financial difficulties because it has been paying excessively high personal incomes and in general has been behaving like a spend-thrift: in the first 6 months of this year the republic's economy earned an income that was 28.1 percent larger than in the same period of 1982. The amount of funds left to its disposition (for personal incomes, for social services and for expansion of plant and equipment) has increased 25.5 percent, 2.6 index points less, then, than the growth of income. Personal incomes received 22 percent more than last year, which is less, then, than afforded by the growth of income and indeed by the growth of net income. At the same time 38 percent more funds went into the business fund than last year, 26 percent more into the reserve fund, and 38 percent more was set aside for depreciation of equipment. In financial terms the picture in the first 6 months of this year is as follows:

1. Funds set aside for reproduction from January through June 1983

	<u>Billions of Dinars</u>
Depreciation	52.0
Business fund	45.4
Reserve fund	<u>8.2</u>
Total	105.5

2. The following obligations were charged to the funds set aside for reproduction:

	<u>Billions of Dinars</u>
Repayment of long-term credits for fixed and working capital	37.4
Current losses	26.3
Loan to the Federal Fund for Development of the Economically Underdeveloped Republic and SAP Kosovo	7.0
Appropriations for development of economically underdeveloped regions within the republic, for development programs in agriculture, and to repay the obligations of the Obrovac TG [further expansion unknown]	4.0

Table (continued)

	<u>Billions of Dinars</u>
Funds for development of the large-scale infrastructure	<u>5.0</u>
Total	79.7

It is clear from these figures where most of the economy's accumulation is going, though it should be mentioned that only part of the unmet obligations to banks are indicated in the losses column, and that these figures do not indicate a portion of current accumulation which is being set aside for investments, for which the economy has furnished 34 billion dinars from its own sources over the 6-month period.

Anyone who has the patience to think about all these figures for a moment will not be surprised that the Croatian economy incurred a loss in the first half of this year that was 82.8 percent greater than in the same period of last year (26.3 billion as against 14.4 billion dinars), accompanied by the datum that more than 10 billion dinars of losses were carried over from previous years. At the end of the first half of the year 1,008 basic organizations of associated labor with an aggregate labor force of almost 200,000 workers showed a loss in current business operation.

At the end of the first half of the year there were 35 organizations in the Croatian economy which showed losses larger than 100 million dinars. First on the list was the Rijeka Petroleum Refinery (OOUR [Basic Organization of Associated Labor] "Fuel and Aromatic Production") followed by the electric power industries in Rijeka and Zagreb (the OOUR "TE [Thermal Electric Power Plant] Rijeka," the OOUR "TE" of Zagreb, and the OOUR "Plomin"), and then "Sljeme" (OOUR "Meat Production") and "Belje" (OOUR "Packinghouse"), and then again the Zagreb electric power industry (OOUR "TE" of Sisak), the Zagreb Municipal Gas Plant (OOUR "Distribution"), the Zagreb electric power industry (OOUR "Electric Power Transmission"), and the Split "Elektroprenos" (OOUR "Electric Power Industry" of Dalmatia), the Cakovec "Hydroplant" and "Thermal Plant" Jertovac in Konjscina, the "Zakucac" Hydroplant in Omis, and the "Orlovac" Hydroplant in Senj....

More than half of the losses, 14.5 billion dinars, are concentrated in the republic's electric power industry, in petroleum production and the food processing (mainly meatpacking) industry. These are organizations which for years have been piling up losses and in which the reasons for the economy's more difficult business operation which have already been enumerated are joined by one more: disparity between input and output prices, the impossibility--because of the high purchase prices of petroleum, livestock, and so on--of covering operating costs, social obligations and the personal incomes of employees.

Many organizations which incurred current business losses in the first half of the year will probably--some by their own efforts, others with outside

help--vanish from the list of losing operations by the end of the year. This applies above all to organizations in hostelry and tourism, whose accounts will probably be different after the end of the tourist season (which was fortunately successful). Emergency financial programs began to be carried out this year in 242 organizations which ended last year with a loss. By the end of July the loss had been covered in 167 basic organizations, and that mainly with emergency credits (52 percent of the losses were covered from joint reserve funds of sociopolitical communities, 20 percent with the resources of basic organizations with which a self-management accord had been concluded on mutual coverage of losses, and the rest was covered with resources from banks, other organizations, and so on).

The assessment is, and events confirm it, that it will be necessary to dig much deeper for the causes behind the fact that every sixth or seventh basic organization in the republic has been operating at a loss this year, for the causes of the fact that losses in current business operation "are the most vulnerable area, one in which the overall stabilization efforts of the society have not achieved any very significant shifts."

#### Serbia: A Small Group Incurring the Largest Losses [by Dragoljub Zivkovic]

The 131,067 workers in Serbia proper employed in OOUR's which have operated at a loss in the first 6 months of this year will not be satisfied at all with the judgment that the public has already become hardened to the chronically high amounts of losses incurred by those for whom this condition is chronic. If that sum is multiplied by the statistical sample of the average family, then the number of those whose head is directly exposed to the difficulties and oversights in business operation is considerably larger.

At the same time this means that this is a problem of exceptional political seriousness and that it is altogether insufficient to be concerned with the so-called losses only every quarter and to speak about them only in the language of figures, as is done by the Social Accounting Service. That is, by comparison with prices, for example, or the shortage of power, losses have been somewhere on the periphery, although a careful analysis of each individual negative balance sheet would reveal the hotbeds of the economic difficulties.

In Serbia proper there were 580 organizations in the first half of this year which operated at a loss, which is only 23 OOUR's or 4 percent, more than in the same period of 1982. But if the number of OOUR's included in this list is rising steadily in our case, the amount of the total loss and the jump in percentage almost take one off one's feet, the losses were up 82.3 percent over the same period of last year and amount to 11,792 million dinars.

Nor is the situation much better in what is referred to as noneconomic activity. In the first half of this year 169 organizations of associated labor in the social services showed a loss of 316 million dinars. To be sure, there were fewer organizations operating at a loss than in the first half of 1982 (a drop from 196 to 169 organizations), but the amount of the losses rose 11.6 percent, or 33 million dinars. Social welfare and health accounted for

a sizable share of the loss (253 million dinars), which is felt most by those who are ill, since medical standards are being adapted to the lack of money. The calculation to the effect that a meal in the hospital is one-third more expensive than the calculation used in budgeting money for that purpose shows the kind of position medical institutions are in.

The lateness in payments of pensions until recently was close to becoming a scandal. The angry pensioners, who for the past several months have not known when they would receive their pension, were not exactly pacified when they learned that in 6 months of this year the republic SIZ [Self-Managing Community of Interest] for Old-Age and Disability Insurance had an uncovered expenditure in the amount of 2,412 million dinars, or 60.9 percent of all the uncovered expenditures of SIZ's in Serbia. Funds have now been furnished for pensions.

But what is the situation of those who realize their income in the organizations which are operating at a loss? Under the Law on the Size of Advances of Personal Incomes, in OOUR's which show a loss in business operation (organizations in the tourist industry and those furnishing airport services are an exception because of the nature of their business), a basic organization operating at a loss that is the same as or greater than the amount of the reserve fund--unless it has concluded an accord within the work organization establishing the obligation of mutual coverage of losses or unless the opstina assembly has granted it permission to pay a larger advance--can pay workers a personal income only in the amount of the average personal income per worker paid in the accounting period before the loss was incurred. According to the figures of the Social Accounting Service, in Serbia there were 111 organizations in the economy and social services paying personal incomes up to the average from the period when they operated without a loss, while the advances for 17 organizations were set and approved by opstina assemblies. These figures pertain only to organizations which have recorded more than 11 million dinars in losses in the case of the economy or more than 2 million in the case of the social services.

It is difficult to estimate on the basis of the figures for the first 6 months what the statement will look like for the first three quarters. Those familiar with the situation say that we should not expect radical changes either for better or for worse. The somewhat livelier economic activity is offset by the growth of uncollected accounts receivable, the somewhat livelier exports by the smaller imports in some other sector of economic activity, the higher price by the rise in payments for personal incomes and other consumption, so that probably there is accuracy in the assessment to the effect that the present trends and distribution of losses will persist not only until the accounting which is now being worked on, but that similar [original reads "personal"] results will also show up in the year-end statement. To be sure, in Serbia proper the losses for the first 6 months we have been talking about here were smaller than in the first 3 months of this year, indeed by 3,334 million dinars, but the experts are very doubtful about the possibility of seeing the same reduction after the account for the first 9 months.

Instead of that kind of guesswork it is much more important to finally undertake an objective analysis of the causes of losses in such a proportion. For years they have been going around in the same circle, and it is not particularly difficult to identify them. Socialization of poor business operation always costs more than the monetary expression of the losses itself, since it holds back the development of those which are performing well. In interpreting for newsmen the last version of the draft of the resolution for 1984--at least the last at the moment when this article was written--Zvone Dragan, vice chairman of the Federal Executive Council, recently explained the government policy this way: "I am in favor of an offensive if this presupposes liquidation of those organizations which have been chronically operating at a loss and which have not done so because of price policy, but because of their own laxity, low productivity and mistaken investments."

In Serbia, for example, the IHP Prahovo, which incidentally holds the record for losses, and the entire amount of the loss of the OOUR "Manufactured Fertilizers" of Zorka (more than 214 million dinars) occurred in spite of the fact that capacity is being utilized at 100 percent, and that at a high level of productivity. Even though their performance has been excellent, these collectives have found themselves in the squeeze between the prices of components for manufactured fertilizers and the finished product. Those who have made the greater effort have fared worst. But there are considerably more of those which have recorded losses because of poor operation or which have been condemned to losses right from the ribbon-cutting ceremony. When real discussions begin about them, and if those discussions yield worthwhile results, the reports on those operating at a loss will also be shorter and more sanguine.

The Nine Largest Losses up to the End of June 1983 (in millions of dinars)

1. IHP Prahovo (7 OOUR's)	2,242.3
2. MKS [Smederevo Metallurgical Combine] Smederevo (2 OOUR's)	913.8
3. "Crvena Zastava" Plants, Kragujevac (7 OOUR's)	713.0
4. "Autoput," Belgrade (4 OOUR's)	650.7
5. JAT [Yugoslav Airlines], Belgrade (4 OOUR's)	596.8
6. "Zorka" of Sabac (4 OOUR's)	549.0
7. "21 Maj" of Rakovica (2 OOUR's)	472.3
8. Belgrade Water and Sewer Department	245.5
9. "Tigar" of Pirot (2 OOUR's)	224.0
10. "Juhor" of Svetozarevo (2 OOUR's)	218.8

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YUGOSLAVIA

OFFICIAL DESCRIBES CRITICAL SITUATION OF RAILROADS

Belgrade BORBA in Serbo-Croatian 12-13 Nov 83 p 4

[Article by Davor Soha, "Full Speed Into Losses"]

[Text] Regarding himself responsible to point out the exceptionally difficult situation in which the Yugoslav railways find themselves today to the delegates of the Council of Republics and Provinces of the Serbian Assembly, Zoran Nastic, chairman of the management committee of the Yugoslav Railways Community [JZ], said recently: "Instead of contributing to economic stabilization, it could easily happen that railways become a limiting factor in the realization of the total stabilization of the economy."

Nastic may have failed to mention that railways already are a limiting factor, the more so as he mentioned that Yugoslav economy has been curtailed by about 12,000 railroad cars this year, viz. 657 cars daily. Together with a number of other indicators which are not at all favorable to our railways, this only completes the overview of long-standing problems. Worn-out JZ cars have for a long time run into ever larger losses and incessant self-management misunderstandings, without any particular prospects that they would soon arrive into the "repair station."

Dr Nikodije Paunovic, director of the Belgrade Institute for Transportation Economics, is incomparably clearer when he speaks of the situation in the domestic railroad transport: "Railroad transport, such as it is, not only limits a faster economic development but it is a real organizational shame. Such railway transport cannot be found anywhere else in the world. It does not correspond to the needs of the economy or society, and it lags more and more behind contemporary transportation systems of developed countries, which certainly limits an efficient inclusion of our country into the European transportation system and international division of labor."

"The JZ has, from the economic point of view, fallen lower than ever since its beginning. Very poor work organization, in spite of a large investment for modernization, has led to poorer results today than those before the war," Dr Paunovic explained further. "Lack of organization, bordering on anarchy, has created a number of difficulties and problems.

Each OOUR in the JZ, and there are more than 350 of them, behaves like an independent enterprise. Everybody is concerned with one's own income only. The OOUR's have transformed the railways into their property, and manage it without taking the common interest and the economy of the whole into account."

Dr Paunovic also points to the fact that in our country the railways have been neglected for years and that they figured only sporadically in the economic development plans. This is why it is not surprising that in the development of railway transport we find ourselves definitely in last place in Europe. Worn-out tracks, old lines, very low salaries for responsible jobs and things like that are a story by themselves, and this is all a consequence of many years of neglect."

"However," Dr Paunovic points out, "fragmentation and disorganization are the greatest problems for the railway system. Self-management pulse can hardly be felt, or rather everybody in the JZ interprets self-management in the way most suitable to him. Basic Organizations of Associated Labor are proliferating wildly. For example, on the Ruma-Sabao line, which is only about 30 km long, railway people decided to form, no less than three OOUR's. I wonder, what for? However, such 'ideas' are, as a rule, always supported and promoted by somebody. In Serbia, railways are today being directed from eight different centers, which is insane."

"There are innumerable examples of similar nonsense in the railway transportation system in our country, all of this because various regulations and laws favor those who pay more attention to their own pocket and local interest than to the common good. Is it, for example, normal that on the Croatian-Slovenian border engines have to be changed because of the switch from one transportation 'system' to another. Or is it normal that the Skopje railway people have their own trucks and use them for transport all over Yugoslavia because railway transport, which is incomparably cheaper, is not 'profitable' to them."

Dr Paunovic maintains that it is not even worth speaking about the creation of a unified transportation system, because resistance is high. He says that everybody is fighting for one's own "autonomy" which is bad for us all. The OOUR's very cleverly hide behind the Law on Associated Labor, and it is difficult to change anything here. In Serbia, for example, railways have not been able to produce annual plan for years, and according to law they should have been put under receivership long ago. Yet things go on like before.

Railwaymen, certainly, have their own arguments. They mostly emphasize the very difficult economic situation because which has caused the JZ medium-term development plan to be barely 50 percent realized. The track overhaul plan has been fulfilled at only 29 percent, which causes greater and greater difficulties on main railroad lines. While in other European countries many trains run at speeds of over 160 km/h, in our country there are very few lines that can stand the speed of 100 km.

The plan for obtaining the necessary engines has been fulfilled at 35 percent, motor trains at 26 percent, passenger cars at 19, and freight cars at 31 percent. For all these reasons railway people regard their development programs as their vital question. If additional funds are not obtained and modernization is not speeded up, it is quite certain that the JZ will enter next year with lower transportation capacity than they had a few years ago.

Another significant problem is foreign currency situation. Last year the railways generated about 200 million dollars foreign currency revenue, which clearly indicates that railways could be a very significant stabilization factor. However, as our economy very irregularly fulfills its foreign currency obligations toward foreign railways for the export and import of its merchandise, the JZ owes 85 million dollars, and it is only a question of time when our railroad cars will not be allowed to cross the frontier.

In the struggle for the realization of the Long-Term Program of Economic Stabilization, the railways certainly have their place and opportunity. Some efforts have already been made within the JZ in this direction, but the railway problem obviously can no longer be a matter for the railway people only.

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